

June 8, 2006

Peter Van Alyea
Redwood Oil Company
50 Professional Center Drive
Rohnert Park, CA 94928

March 2006 Groundwater Monitoring Report/
Operations and Maintenance Report
Redwood Oil Service Station
1100 Bennett Valley Road
Santa Rosa, California
ECM Project #98-511-14

Dear Mr. Van Alyea:

This report provides the results of the quarterly groundwater monitoring at the Redwood Oil Service Station located at 1100 Bennett Valley Road in Santa Rosa, California (Figure 1, Appendix A). Also included is the summery of operations and maintenance activities for the Groundwater Extraction (GWE) system operating at the site for the time period between January 18 and March 29, 2006.

Groundwater Monitoring

On March 31 and April 3, ECM personnel visited the site. Groundwater elevations were measured on March 31 and groundwater samples were collected from the thirteen conventional monitoring wells (MW-4 through MW-14, MW-16, and MW-17) on April 3. A groundwater elevation was also measured in piezometer PZ-1, and a water sample was collected from the domestic well located at 1020 Bennett Valley Road. The well locations are provided on Figure 2 (Appendix A).

Depth to water was measured in each of the monitoring wells. Wells were also checked for the presence of free-phase hydrocarbons. Free-phase hydrocarbons were not observed in any of the wells. Wellheads and well vaults were observed to be in good condition. Water level data is provided in Table 1 (Appendix B) and a groundwater elevation contour map is included as Figure 2 (Appendix A).

The groundwater samples were forwarded under chain of custody record to Entech Analytical Labs, Inc. of Santa Clara, CA for analysis. Analytical results for groundwater are included in Table 2 (Appendix B). Groundwater samples were collected in accordance with ECM Standard

Operating Procedure - Groundwater Sampling (Appendix E). The chain of custody document and laboratory analytical reports are included as Appendix C. Water sampling data sheets are included in Appendix D. Purge water and decon rinseate were transferred to the groundwater remediation system holding tank for treatment and permitted discharge.

Gasoline, diesel, BTEX constituents, and MTBE have been detected consistently in samples from site monitoring wells. Analytical results for this sampling event were typical of previous results. Ground water flow was to the west at an approximate gradient of 0.001 - 0.006 ft/ft. Groundwater gradient at the site is influenced by the groundwater extraction system. The groundwater extraction system was off during the March 31 site visit, and influence of the system is not depicted on Figure 2 (Appendix A).

Wells MW-4 through MW-7 represent the impacted area of the site due to their proximity to the former USTs. Well MW-5 represents the most impacted area of the site. Gasoline, diesel, BTEX compounds, and the oxygenates MTBE and TBA have been detected consistently in samples from wells MW-4 through MW-7. Contaminant concentrations detected in samples collected during this event were consistent with historical results.

Wells MW-8 and MW-9 are located downgradient of the site, to the southeast and south, respectively. Contaminant concentrations for samples from MW-8 and MW-9 have typically been low or below detection limits. Gasoline and BTEX hydrocarbons were detected in the March 2006 sample from MW-8. BTEX hydrocarbons were detected in the sample from MW-9. Diesel and fuel oxygenates were not detected in either sample.

Wells MW-10, MW-11, and MW-12 are located downgradient, to the west of the site. Analytical results for samples from MW-10 and MW-11 have consistently been low or below detection limits for all contaminants of concern. Contaminant concentrations detected in the samples from MW-10 and MW-11 were consistent with previous results. Gasoline, BTEX hydrocarbons, and MTBE were detected in the sample from MW-10. BTEX hydrocarbons were detected in the sample from MW-11. No other analytes were detected in the sample from MW-11. Diesel was not detected in either sample.

Contamination in samples from MW-12 has fluctuated from high concentrations to concentrations below detection limits. Low concentrations of BTEX hydrocarbons were detected in the sample collected during the March 2006 event. Gasoline, diesel, and fuel oxygenates were not detected in the sample. There is no apparent correlation between ground water elevation and contaminant concentration in well MW-12.

Well MW-13 is located cross-gradient, to the north of the site. Analytical results reported showed an increase in gasoline and BTEX compound concentrations over previous results. Increases in contaminant concentrations have been noted during several rounds of sampling. A correlation to groundwater elevation is not apparent. Hydrocarbons as diesel were not detected

in the sample from MW-13. 410 ppb higher boiling gasoline compounds were reported in the diesel analysis. A diesel chromatographic pattern was not present.

Well MW-14 is located downgradient, to the west of the site. Gasoline, diesel, and BTEX hydrocarbons have consistently been detected in samples from MW-14. Oxygenates have been detected at lower concentrations. Results from this sampling event were consistent with historical results.

Well MW-15 was installed to a depth of 150 ft bgs and contained four sample ports (30 - 40 ft, 60 - 70 ft, 83 - 93 ft, and 140 - 150 ft). Well MW-15 was installed in April, 2005 and was sampled quarterly since installation. An on-site evaluation of the well, combined with consistent historical sample results, indicated communication between the 30 - 40 ft sample port and the 140 - 150 ft sample port. All data collected from these sample ports is assumed to be invalid. There is no indication that the 60 - 70 ft sample port or the 83 - 93 ft sample port were affected. However, the entire well is considered compromised and all data is considered unreliable.

In April of 2006 well MW-15 was abandoned and replaced with four conventional monitoring wells screened at different intervals (MW-15A, MW-15B, MW-15C, and MW-15D). A report detailing the installation will be submitted under separate cover. The wells were surveyed during May 2006. Water level measurements and laboratory analytical results of quarterly samples will be included in future monitoring reports.

Wells MW-16 and MW-17 were installed in April, 2005 to evaluate groundwater in the 30 - 40 ft zone downgradient of the site. BTEX compounds and MTBE have been detected in all samples collected from MW-16 and MW-17. Diesel has not been detected in any of the samples. Gasoline was detected in the samples from MW-16 collected in June and December of 2005. Gasoline was detected in the sample from MW-17 collected during June of 2005. Gasoline, BTEX compounds and MTBE were detected in the April 2006 sample from well MW-16. BTEX compounds and MTBE were detected in the April 2006 sample from well MW-17. Concentrations detected in samples from MW-16 and MW-17 were consistent with previous analytical results.

A domestic well at 1020 Bennett Valley Road was sampled on April 3, 2006. No analytes were detected in the sample.

Remedial System Operation

An air sparge (AS) system was formerly operational at the site. A summary report describing the AS system was submitted in July 2000.¹ The AS system became operational on July 18, 2000 and was deactivated during the third quarter of 2004. A ground water extraction (GWE) system is currently operational at the site. A summary report describing the GWE system installation was submitted in March 2004.² The GWE system became operational on December 5, 2003. After repairs and modifications the system was permanently activated on February 23, 2004.

On September 11, 2004, free product was detected in the system holding tank and the system was deactivated. The system was reconfigured to process free product under permit by the Santa Rosa Fire Department. Upon permit approval, the remediation system was reactivated on July 5, 2005 and has operated continuously since activation, with downtime for routine maintenance and system evaluation. Layout of the treatment system pad is shown in Figure 4 (Appendix A).

Analytic laboratory reports for treatment system influent samples are included in Appendix C. Operation and maintenance field notes are presented in Appendix D.

GWE System Operation

The GWE system extracts ground water from three wells (EX-1, EX-2, and EX-3, Figure 3, Appendix A). EX-1 is 4 inches in diameter and 31 ft in depth. EX-2 and EX-3 are 6 inches in diameter and 40 ft in depth. Each well contains a top-loading pump which is 5 ft in length and set approximately 0.5 ft from the bottom of each well. Between January 18, 2006 and March 29, 2006, a total of 689,733 gallons of ground water were extracted by the system. Flow rate for the system between October 27, 2005 and January 18, 2006 varied from 0.0 to 12.0 gallons per minute (GPM). Since initial activation, the GWE system has extracted approximately 4,000,000 gallons of ground water. Table 4 (Appendix B) provides complete influent analytical results for the system. Table 5 (Appendix B) provides flow totalizer readings for the GWE system.

GWE System Performance Evaluation

System performance may be measured by quantity of hydrocarbons removed. Since hydrocarbons have a relatively low solubility in water, mass of hydrocarbons removed by a

¹ ECM, 2000, Air Sparge Investigation Report, 1100 Bennett Valley Road, Santa Rosa, California, September 13, 2000, 2 pages and 1 attachment.

² ECM, 2004, Groundwater Extraction System Installation Report, 1100 Bennett Valley, Santa Rosa, California, March 12, 2004, 6 pages and 6 attachments.

ground water extraction system is typically low relative to the quantity of hydrocarbons sorbed to soil. Another measure of system performance is the system's ability to control the offsite migration of impacted groundwater.

Between January 18, 2006 and March 29, 2006, a total of 689,733 gallons of ground water were extracted by the system (Table 5, Appendix B). Hydrocarbon removal is calculated using the influent concentrations provided in Table 4 (Appendix B). Influent samples were collected for the first quarter of 2006 on January 11. The concentration of gasoline in the influent sample was 6,500 parts per billion (ppb). Diesel was not detected in the sample. Hydrocarbons (C8-C18) were detected at 570 ppb in the diesel analysis and were noted as possible gasoline compounds in the TPH-diesel range. A diesel chromatographic pattern was not present in the analysis.

Assuming the influent stream sample collected on January 11, 2005 is representative of the period between January 18 and March 29, 2006, then the mass of petroleum hydrocarbon removed by the GWE system during this period is approximately 17 kg. Cumulative totals for hydrocarbon removal are provided in Table 5 and Graph 1, Appendix B.

Water level measurements are collected from thirteen conventional monitoring wells (MW-4 through MW-14, MW-16, and MW-17) and one piezometer (PZ-1) on a quarterly basis. Water level measurements were collected from the eleven monitoring wells and one piezometer on March 31, 2006. Water level measurements in monitoring wells and the piezometer are used to evaluate GWE system performance in terms of drawdown and plume migration control.

Figure 2 (Appendix A) shows ground water elevations in monitoring wells for March 31, 2006, and shows ground water elevation contours based on the measurements collected. Water level measurements for this quarter were collected during system downtime for maintenance. The influence of the remediation system on groundwater elevation is not depicted. Water levels for the second quarter of 2006 will be measured while the remediation system is active in order to evaluate drawdown. The next quarterly sampling and system operation report will include a figure with contours for drawdown by the groundwater system.

Peter Van Alyea
ECM Project #98-511-66

Page 6

Thank you for the opportunity to provide services to Redwood Oil Company. Please call if you have any questions.

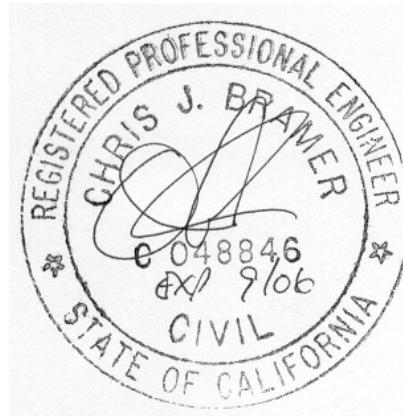
Sincerely,
ECM Group



David Hazard
Environmental Scientist



Chris Bramer
Professional Engineer #C048846



Attachments:

- A - Figures
- B - Tables
- C - Chain of Custody Document and Lab Analytical Reports
- D - Water Sampling Data Sheets
- E - Standard Operating Procedure

cc: Joan Fleck, North Coast Regional Water Quality Control Board

APPENDIX A

FIGURES

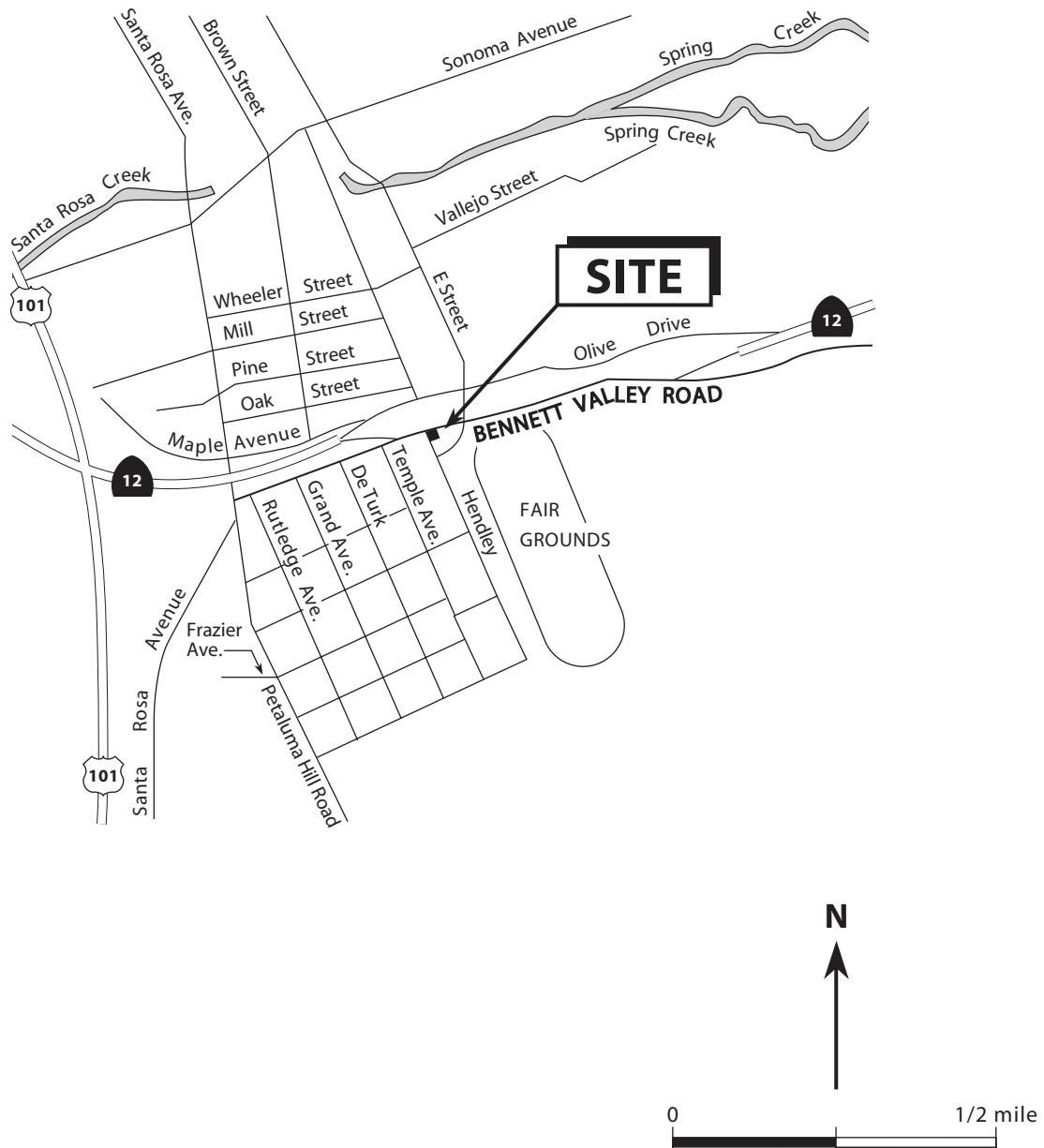


Figure 1. Site Location Map – Redwood Oil Service Station, 1100 Bennett Valley Road, Santa Rosa, California

EXPLANATION

- **MW-13** Monitoring well
- MW-3 Former monitoring well
- EX-3 Extraction well
- PZ-1 Piezometer
- 163.03 Ground water elevation, in feet above mean sea level
- [162.54] Ground water elevation not used in contouring
- 162.50 Ground water elevation contour, dashed where inferred

Approximate ground water flow direction with an approximate gradient of 0.001 - 0.006 ft/ft

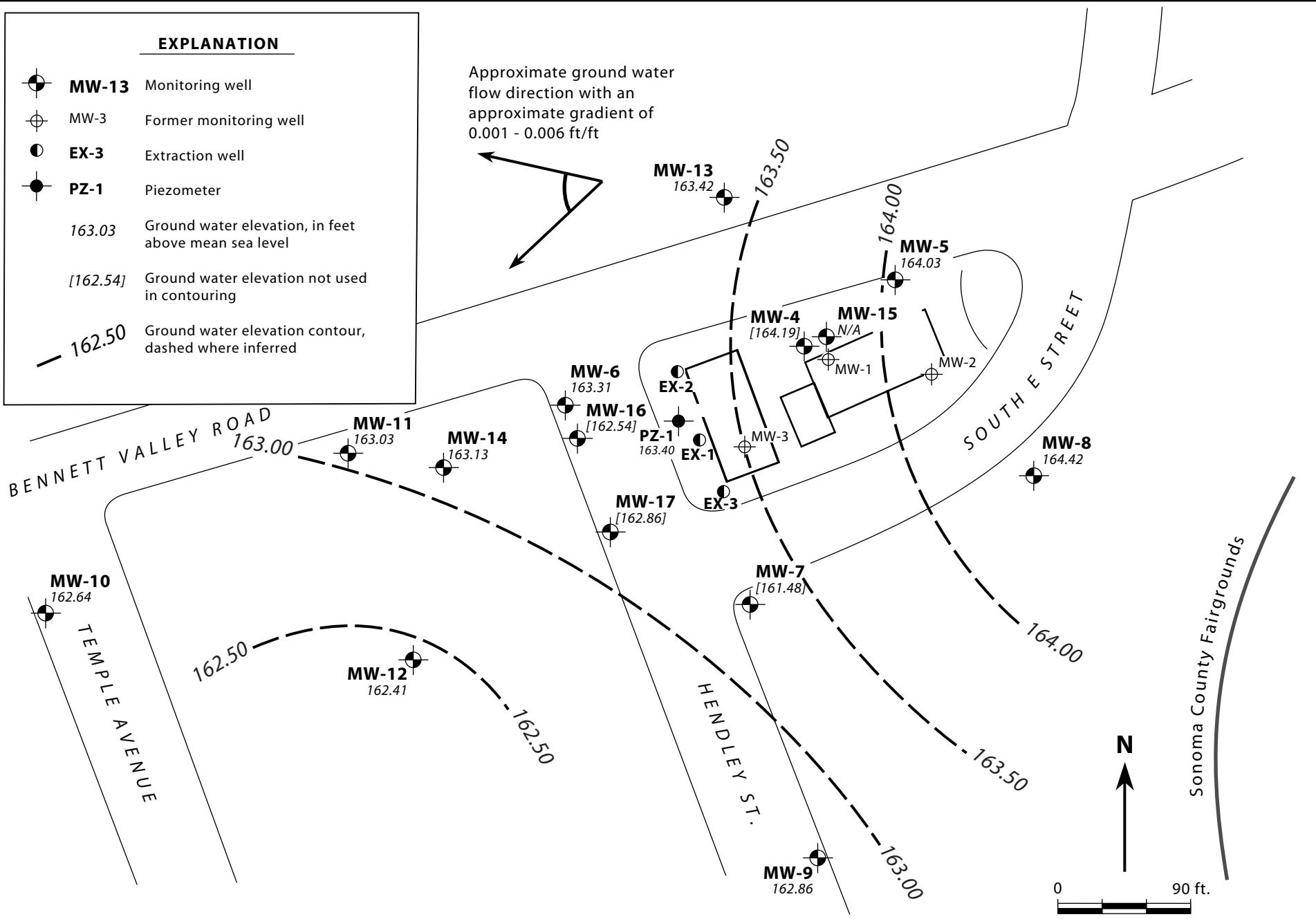


Figure 2. □ Monitoring Well Locations and Ground Water Elevation Contour Map - March 31, 2006 - Redwood Oil Service Station #106, 1100 Bennett Valley Road, Santa Rosa, California

EXPLANATION

- EX-3 Extraction well
- - - Piping trench
- PZ-1 Piezometer point

BENNETT VALLEY ROAD

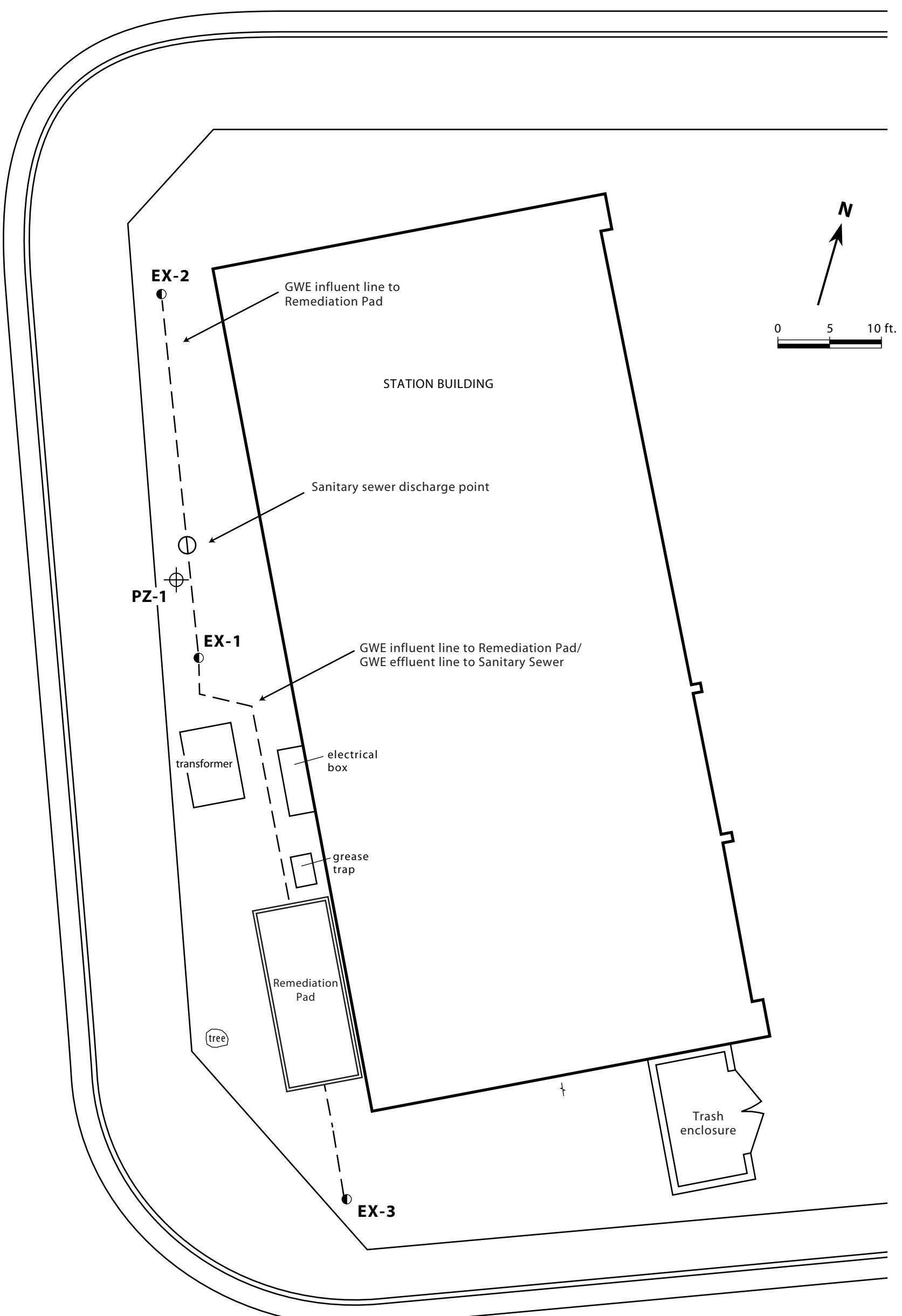
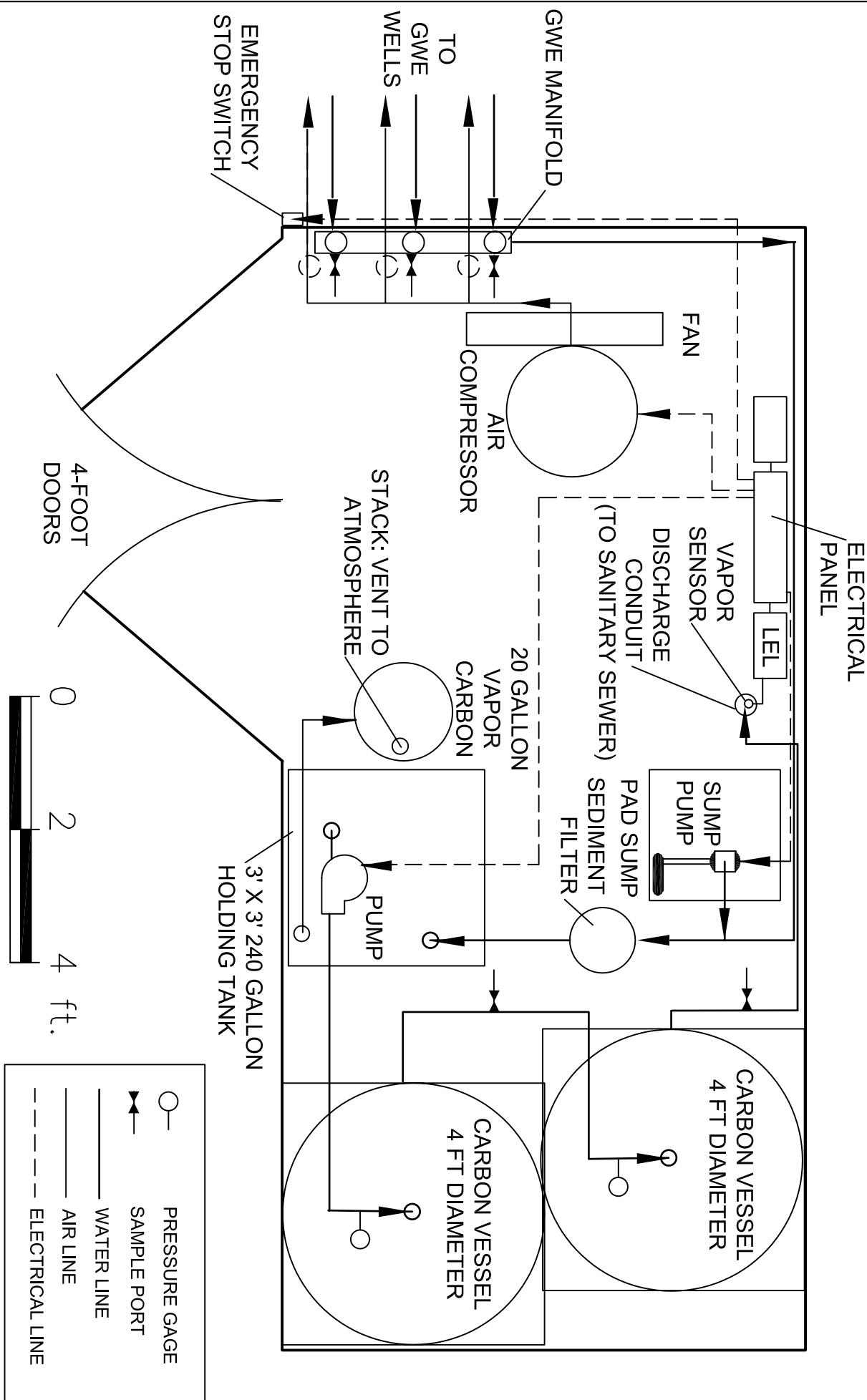


Figure 3.□ Remediation System Layout - Redwood Oil Service Station #106, 1100 Bennett Valley Road, Santa Rosa, California



PROJECT
REMEDIATION SYSTEM
Redwood Oil Service Station # 106,
1100 Bennett Valley Road
Santa Rosa, California



PROJECT NUMBER	DRAWN BY
98-511-66	RG
12/05/05	CB
4	FIGURE NUMBER

APPENDIX B

TABLES AND GRAPHS

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-4	9/18/98	165.15	5.95	159.20	5-20	4-20	0-4	
	1/4/99		7.12	158.03				
	3/10/99		4.37	160.78				
	10/1/99		7.73	157.42				
	1/5/00		8.70	156.45				
	3/29/00		4.88	160.27				
	7/11/00		7.60	157.55				
	9/29/00		8.11	157.04				
	12/7/00		8.52	156.63				
	3/6/01		6.60	158.55				
	6/21/01		7.05	158.10				
	9/18/01		8.47	156.68				
	12/19/01		7.05	158.10				
	3/20/02		4.50	163.21				
	6/20/02	167.71	6.18	161.53				Surveyed for EDF compliance.
	9/20/02		7.68	160.03				
	12/31/02		3.42	164.29				
	3/25/03		4.80	162.91				
	7/1/03		5.76	161.95				
	10/2/03		7.61	160.10				
	12/9/03		7.80	159.91				
	3/2/04		4.12	163.59				
	6/8/04		7.00	160.71				
	6/28/04		7.37	160.34				
	9/9/04		8.71	159.00				
	12/28/04		7.84	159.87				
	3/29/05		3.60	164.11				
	6/27/05		5.24	162.47				
	9/27/05		8.51	159.20				
	12/14/05		8.70	159.01				
	3/31/06		3.52	164.19				

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-5	9/18/98	165.22	7.62	157.60	5-20	4-20	0-4	
	1/4/99		7.61	157.61				
	3/10/99		4.29	160.93				
	10/1/99		8.70	156.52				
	1/5/00		9.28	155.94				
	3/29/00		5.27	159.95				
	7/11/00		7.47	157.75				
	9/29/00		9.05	156.17				
	12/7/00		8.04	157.18				
	3/6/01		5.40	159.82				
	6/21/01		7.95	157.27				
	9/18/01		9.45	155.77				
	12/19/01		5.60	159.62				
	3/20/02		4.85	162.94				
	6/20/02	167.79	7.21	160.58				Surveyed for EDF compliance.
	9/20/02		9.01	158.78				
	12/31/02		4.35	163.44				
	3/25/03		5.15	162.64				
	7/1/03		7.00	160.79				
	10/2/03		9.00	158.79				
	12/9/03		8.60	159.19				
	3/2/04		4.58	163.21				
	6/8/04		8.18	159.61				
	6/28/04		9.09	158.70				
	9/9/04		10.32	157.47				
	12/28/04		7.19	160.60				
	3/29/05		4.10	163.69				
	6/27/05		6.43	161.36				
	9/27/05		10.32	157.47				
	12/14/05		9.52	158.27				
	3/31/06		3.76	164.03				

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-6	9/18/98	163.49	8.50	154.99	5-20	4-20	0-4	
	1/4/99		7.88	155.61				
	3/10/99		3.97	159.52				
	10/1/99		9.65	153.84				
	1/5/00		9.70	153.79				
	3/29/00		5.91	157.58				
	7/13/001		---	---				Monitoring well was inaccessible
	9/29/00		9.73	153.76				
	12/7/001		---	---				Monitoring well was inaccessible
	3/6/01		4.37	159.12				
	6/21/01		8.52	154.97				
	9/18/01		10.12	153.37				
	12/19/01		9.93	153.56				
	3/20/02	166.52	5.29	161.23				Surveyed for EDF compliance.
	6/20/02		7.95	158.57				
	9/20/02		9.91	156.61				
	12/31/02		3.89	162.63				
	3/25/03		5.59	160.93				
	7/1/03		7.58	158.94				
	10/2/03		9.70	156.82				
	12/9/03		8.70	157.82				
	3/2/04		5.21	161.31				
	6/8/04		8.51	158.01				
	6/28/04		9.93	156.59				
	9/9/04		11.04	155.48				
	12/28/04		--	--				Monitoring well was inaccessible
	3/29/05		3.64	162.88				
	6/27/05		6.85	159.67				
	9/27/05		10.87	155.65				
	12/14/05		9.66	156.86				
	3/31/06		3.21	163.31				

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-7	9/18/98	163.33	8.81	154.52	5-20	4-20	0-4	
	1/4/99		7.18	156.15				
	3/10/99		4.40	158.93				
	10/1/99		8.31	155.02				
	1/5/00		8.79	154.54				
	3/29/00		4.96	158.37				
	7/11/00		7.11	156.22				
	9/29/00		8.68	154.65				
	12/7/00		8.31	155.02				
	3/6/01		4.62	158.71				
	6/21/01		7.70	155.63				
	9/18/01		9.17	154.16				
	12/19/01		4.96	158.37				
	3/20/02	167.01	---	---				Resurveyed for EDF compliance. Monitoring well was inaccessible.
	6/20/02		7.00	160.01				
	9/20/02		8.81	158.20				
	12/31/02		4.17	162.84				
	3/25/03		5.00	162.01				
	7/1/03		6.92	160.09				
	10/2/03		8.70	158.31				
	12/9/03		8.24	158.77				
	3/2/04		5.61	161.40				
	6/8/04		8.12	158.89				
	6/28/04		9.29	157.72				
	9/9/04		10.34	156.67				
	12/28/04		6.02	160.99				
	3/29/05		4.02	162.99				
	6/27/05		6.30	160.71				
	9/27/05		11.42	155.59				
	12/14/05		10.42	156.59				
	3/31/06		5.53	161.48				

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-8	9/18/98	164.37	6.00	158.37	5-20	4-20	0-4	
	1/4/99		7.84	156.53				
	3/10/99		2.41	161.96				
	10/1/99		7.29	157.08				
	1/5/00		7.57	156.80				
	3/29/00		3.52	160.85				
	7/11/00		5.71	158.66				
	9/29/00		7.42	156.95				
	12/7/00		7.00	157.37				
	3/6/01		3.08	161.29				
	6/21/01		6.22	158.15				
	9/18/01		7.87	156.50				
	12/19/01		3.45	160.92				
	3/20/02	166.93	3.10	163.83				Surveyed for EDF compliance.
	6/20/02		5.48	161.45				
	9/20/02		7.30	159.63				
	12/31/02		2.99	163.94				
	3/25/03		3.29	163.64				
	7/1/03		5.20	161.73				
	10/2/03		7.21	159.72				
	12/9/03		6.67	160.26				
	3/2/04		2.38	164.55				
	6/8/04		6.27	160.66				
	6/28/04		6.91	160.02				
	9/9/04		8.15	158.78				
	12/28/04		5.28	161.65				
	3/29/05		2.60	164.33				
	6/27/05		4.84	162.09				
	9/27/05		7.88	159.05				
	12/14/05		7.01	159.92				
	3/31/06		2.51	164.42				

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-9	7/11/00	162.72	6.28	156.44	5-20	4-20	2-4	
	9/29/00		7.75	154.97				
	12/7/00		7.30	155.42				
	3/6/01		4.34	158.38				
	6/21/01		6.95	155.77				
	9/18/01		8.25	154.47				
	12/19/01		4.66	158.06				
	3/20/02	166.40	4.70	161.70				Surveyed for EDF compliance.
	6/20/02		6.41	159.99				
	9/20/02		7.92	158.48				
	12/31/02		3.75	162.65				
	3/25/03		5.71	160.69				
	7/1/03		6.20	160.20				
	10/2/03		7.30	159.10				
	12/9/03		6.78	159.62				
	3/2/04		4.39	162.01				
	6/8/04		7.10	159.30				
	6/28/04		7.66	158.74				
	9/9/04		8.77	157.63				
	12/28/04		4.66	161.74				
	3/29/05		4.05	162.35				
	6/27/05		5.69	160.71				
	9/27/05		8.49	157.91				
	12/14/05		7.49	158.91				
	3/31/06		3.54	162.86				
MW-10	7/11/00	162.23	8.50	153.73	5-20	4-20	2-4	
	9/29/00		10.07	152.16				
	12/7/00		9.47	152.76				
	3/6/01		4.61	157.62				
	6/21/01		9.00	153.23				
	9/18/01		10.50	151.73				
	12/19/01		5.10	157.13				
	3/20/02	165.91	5.75	160.16				Surveyed for EDF compliance.
	6/20/02		8.45	157.46				

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-10 cont	9/20/02	165.91	10.28	155.63	5-20	4-20	2-4	
	12/31/02		3.53	162.38				
	3/25/03		6.10	159.81				
	7/1/03		8.12	157.79				
	10/2/03		10.10	155.81				
	12/9/03		8.70	157.21				
	3/2/04		4.55	161.36				
	6/8/04		8.73	157.18				
	6/28/04		9.34	156.57				
	9/9/04		10.41	155.50				
	12/28/04		4.74	161.17				
	3/29/05		3.71	162.20				
	6/27/05		7.29	158.62				
	9/27/05		10.52	155.39				
	12/14/05		9.15	156.76				
	3/31/06		3.27	162.64				
MW-11	7/11/00	162.86	8.36	154.50	5-20	4-20	2-4	
	9/29/00		9.96	152.90				
	12/7/00		9.37	153.49				
	3/6/01		4.65	158.21				
	6/21/01		8.78	154.08				
	9/18/01		10.31	152.55				
	12/19/01		5.20	157.66				
	3/20/02	166.54	5.65	160.89				Surveyed for EDF compliance.
	6/20/02		8.27	158.27				
	9/20/02		10.21	156.33				
	12/31/02		4.11	162.43				
	3/25/03		5.98	160.56				
	7/1/03		7.94	158.60				
	10/2/03		10.00	156.54				
	12/9/03		8.86	157.68				
	3/2/04		5.14	161.40				
	6/8/04		8.75	157.79				
	6/28/04		9.88	156.66				

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-11 cont.	9/9/04	166.54	10.98	155.56	5-20	4-20	2-4	
	12/28/04		6.28	160.26				
	3/29/05		3.95	162.59				
	6/27/05		7.29	159.25				
	9/27/05		10.82	155.72				
	12/14/05		9.60	156.94				
	3/31/06		3.51	163.03				
MW-12	7/11/00	162.86	8.49	154.37	5-20	4-20	2-4	
	9/29/00		10.04	152.82				
	12/7/00		---	---				Monitoring well was inaccessible
	3/6/01		---	---				Monitoring well was inaccessible
	6/21/01		9.04	153.82				
	9/18/01		10.46	152.40				
	12/19/01		7.30	155.56				
	3/20/02	166.56	5.81	160.75				Surveyed for EDF compliance.
	6/20/02		8.48	158.08				
	9/20/02		10.35	156.21				
	12/31/02		---	---				Monitoring well was inaccessible
	3/25/03		6.06	160.50				
	7/1/03		8.12	158.44				
	10/2/03		10.18	156.38				
	12/9/03		9.03	157.53				
	3/2/04		5.09	161.47				
	6/8/04		8.96	157.60				
	6/28/04		9.91	156.65				
	9/9/04		11.06	155.50				
	12/28/04		6.34	160.22				
	3/29/05		4.06	162.50				
	6/27/05		7.39	159.17				
	9/27/05		10.91	155.65				
	12/14/05		9.75	156.81				
	3/31/06		4.15	162.41				

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-13	7/11/00	164.14	9.63	154.51	5-20	4-20	2-4	
	9/29/00		10.61	153.53				
	12/7/00		10.07	154.07				
	3/6/01		5.22	158.92				
	6/21/01		9.37	154.77				
	9/18/01		11.00	153.14				
	12/19/01		5.72	158.42				
	3/20/02	167.82	5.97	161.85				Surveyed for EDF compliance.
	6/20/02		8.67	159.15				
	9/20/02		10.67	157.15				
	12/31/02		4.80	163.02				
	3/25/03		6.22	161.60				
	7/1/03		8.21	159.61				
	10/2/03		10.44	157.38				
	12/9/03		9.50	158.32				
	3/2/04		6.19	161.63				
	6/8/04		9.32	158.50				
	6/28/04		10.98	156.84				
	9/9/04		12.11	155.71				
	12/28/04		7.46	160.36				
	3/29/05		4.41	163.41				
	6/27/05		7.59	160.23				
	9/27/05		11.80	156.02				
	12/14/05		10.72	157.10				
	3/31/06		4.40	163.42				
MW-14	3/20/02	166.97	5.90	161.07	5-20	4-20	0-4	Surveyed for EDF compliance.
	6/20/02		8.58	158.39				
	9/20/02		10.51	156.46				
	12/31/02		4.53	162.44				
	3/25/03		6.23	160.74				
	7/1/03		8.17	158.80				
	10/2/03		10.29	156.68				
	12/9/03		9.19	157.78				
	3/2/04		5.62	161.35				

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-14 cont.	6/8/04	166.97	9.08	157.89	5-20	4-20	0-4	
	6/28/04		10.34	156.63				
	9/9/04		11.47	155.50				
	12/28/04		6.74	160.23				
	3/29/05		4.26	162.71				
	6/27/05		7.51	159.46				
	9/27/05		11.30	155.67				
	12/14/05		10.09	156.88				
	3/31/06		3.84	163.13				
MW-15 @ 30'	5/4/05	168.09	8.02	160.07	30 - 40	29 - 41	0 - 29	Surveyed for EDF compliance.
	6/27/05		8.01	160.08				
	9/27/05		12.42	155.67				
	12/14/05		10.73	157.36				Well abandoned, April 2006.
MW-15 @ 60'	5/4/05	168.09	7.68	160.41	60 - 70	59 - 71	41 - 59	Surveyed for EDF compliance.
	6/27/05		8.23	159.86				
	9/27/05		12.38	155.71				
	12/14/05		11.23	156.86				Well abandoned, April 2006.
MW-15 @ 83'	5/4/05	168.09	7.95	160.14	83 - 93	82 - 94	71 - 82	Surveyed for EDF compliance.
	6/27/05		8.52	159.57				
	9/27/05		11.81	156.28				
	12/14/05		10.95	157.14				Well abandoned, April 2006.
MW-15 @ 140'	5/4/05	168.09	8.03	160.06	140 - 150	139 - 150	94 - 139	Surveyed for EDF compliance.
	6/27/05		8.03	160.06				
	9/27/05		12.40	155.69				
	12/14/05		10.75	157.34				Well abandoned, April 2006.

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-16	5/4/05	166.96	7.04	159.92	30 - 40	29 - 40	0 - 29	Surveyed for EDF compliance.
	6/27/05		7.52	159.44				
	9/27/05		11.21	155.75				
	12/14/05		10.55	156.41				
	3/31/06		4.42	162.54				
MW-17	5/4/05	167.20	6.98	160.22	30 - 40	29 - 40	0 - 29	Surveyed for EDF compliance.
	6/27/05		7.48	159.72				
	9/27/05		13.54	153.66				
	12/14/05		12.22	154.98				
	3/31/06		4.34	162.86				
PZ-1	3/2/04	168.23	11.56	156.67	5-20	4-20	0-4	Surveyed for EDF compliance.
	6/8/04		10.42	157.81				
	6/28/04		15.27	152.96				
	9/9/04		16.38	151.85				
	9/27/05		15.29	152.94				
	12/14/05		15.23	153.00				
	3/31/06		4.83	163.40				

Explanation: ft = feet

msl = Mean Sea Level

DTW = Depth to Water

GWE = Ground Water Elevation

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		<-----	ppb	----->					
MW-4	9/18/98	87,000	16,000	8,500	8,200	1,900	7,700	5,900	
	1/4/99	79,000	<1,000	13,000	7,500	1,800	8,800	7,800	
	3/10/99	44,000	<50	7,700	4,400	970	4,100	3,600	
	6/30/99	17,000	270	2,200	300	490	800	3,000	Sample was flagged. See analytical report for details
	10/1/99	---	---	---	--	--	--	--	Monitoring well now on semi annual sampling
	1/5/00	32,000	<50	8,600	770	1,100	2,500	6,000	
	3/29/00	64,000	3,200	9,500	7,400	1,700	6,100	9,000	Sample was flagged. See analytical report for details
	7/11/00	14,000	790	4,300	130	680	420	5,100	Sample was flagged. See analytical report for details
	9/29/00	19,000	<50	3,100	210	570	470	3,900	
	12/7/00	41,000	<50	3,600	1,700	260	1,400	1,300	
	3/6/01	25,000	<50	4,300	4,100	420	2,100	860	
	6/21/01	720	160	140	18	28	12	340	
	9/18/01	3,900	710	1,100	190	120	340	730	
	12/19/01	21,000	1,200	5,000	3,200	710	1,800	1,500	
	3/20/02	<50	<250	<1	<1	<1	<1	200	
	6/20/02	150	<50	21	5	4	7	87	
	9/20/02	720	120	34	3.8	3.5	7.1	720	
	12/31/02	1,300	<50	200	95	22	82	77	
	3/25/03	380	<125	120	30	7	27	3	
	7/1/03	450	<50	160	62	14	54	10	
	10/2/03	400	50	140	37	9	31	2	
	12/9/03	1,000	64	290	100	26	113	47	
	3/2/04	650	<50	190	84	21	82	49	
	6/8/04	<25	260	<0.5	<0.5	<0.5	<1	<1	
	9/14/04	950	55	120	46	16	67	37	
	12/28/04	4,400	310	2,200	39	49	73	1,300	
	3/29/05	3,800	200	350	150	65	320	180	
	6/27/05	430	<50	2.0	3.1	1	0.5	130	
	9/27/05	3,000	190	440	65	47	85	111	
	12/14/05	2,300	<50	310	44	25	73	130	
	4/3/06	240	<50	88	6.5	4.5	15	130	

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		<----- ppb ----->							
MW-5	9/18/98	160,000	39,000	33,000	20,000	4,000	20,000	15,000	
	1/4/99	160,000	<50	31,000	22,000	3,100	16,000	8,400	
	3/10/99	190,000	230	34,000	13,000	3,500	15,000	6,800	Sample was flagged. See analytical report for details
	6/30/99	130,000	1,700	22,000	15,000	2,500	12,000	4,900	Sample was flagged. See analytical report for details
	10/1/99	---	---	---	---	--	---	---	Monitoring well on semi annual sampling
	1/5/00	170,000	<50	38,000	23,000	3,000	16,000	8,000	
	3/29/00	130,000	5,000	17,000	9,300	3,500	12,000	6,500	Sample was flagged. See analytical report for details
	7/11/00	190,000	29,000	33,000	21,000	2,800	13,000	6,500	Sample was flagged. See analytical report for details
	9/29/00	260,000	<50	28,000	25,000	3,700	18,000	7,700	
	12/7/00	250,000	<50	21,000	13,000	2,200	12,000	6,500	
	3/6/01	96,000	<50	54,000	12,000	2,100	9,500	2,300	
	6/21/01	90,000	6,500	23,000	12,000	2,400	11,000	6,200	
	9/18/01	88,000	3,100	23,000	12,000	3,000	14,000	3,600	
	12/19/01	84,000	5,100	25,000	9,600	2,800	12,000	3,300	
	3/20/02	43,000	6,200	19,000	7,300	1,900	9,800	2,200	
	6/20/02	94,000	7,800	28,000	11,000	2,200	8,600	3,200	
	9/20/02	120,000	3,700	30,000	14,000	3,300	15,000	3,000	
	12/31/02	110,000	10,000	23,000	9,500	3,000	11,000	2,400	
	3/25/03	83,000	7,800	26,000	8,000	2,800	11,200	1,600	
	7/1/03	62,000	5,300	33,000	11,000	3,300	13,000	2,200	
	10/2/03	90,000	8,000	31,000	10,000	3,300	13,100	2,500	
	12/9/03	110,000	6,700	29,000	8,800	3,100	13,000	1,600	
	3/2/04	120,000	8,600	38,000	11,000	4,000	13,700	1,000	
	6/8/04	81,000	5,500	31,000	8,100	2,900	10,000	1,300	
	9/14/04	97,000	8,700	27,000	7,100	3,100	11,600	1,100	
	12/28/04	68,000	12,000	17,000	2,400	2,800	12,000	660	
	3/29/05	120,000	5,000	28,000	6,200	3,200	11,200	720	
	6/27/05	120,000	4,900	30,000	7,000	3,200	11,800	620	
	9/27/05	120,000	4,600	29,000	5,700	3,800	12,500	540	
	12/14/05	110,000	4,800	24,000	3,700	2,800	9,900	490	
	4/3/06	41,000	<500	20,000	2,800	2,300	7,800	<500	9,200ppb higher boiling gasoline compounds detected in the diesel analysis. No diesel pattern was present.

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		<----- ppb ----->							
MW-6	9/18/98	49,000	8,000	10,000	3,200	1,600	5,200	10	Sample was flagged. See analytical report for details
	1/4/99	11,000	<50	5,900	360	730	800	180	
	3/10/99	18,000	190	2,800	330	77	930	91	
	6/30/99	23,000	150	7,000	400	480	770	120	Sample was flagged. See analytical report for details
	10/1/99	18,000	640	6,300	78	370	190	<250	Sample was flagged. See analytical report for details
	1/5/00	22,000	<50	8,500	110	350	330	260	
	3/29/00	15,000	1,200	4,200	380	290	460	<50	Sample was flagged. See analytical report for details
	7/13/00	15,000	2,300	3,100	180	400	1,300	<13	Sample was flagged. See analytical report for details
	9/29/00	33,000	<50	9,800	120	530	760	610	
	12/7/008	---	---	---	---	---	---	---	Well was inaccessible
	3/6/01	43,000	<50	30,000	1,300	760	1,300	120	
	6/21/01	44,000	1,700	18,000	810	1,500	1,800	<1,250	
	9/18/01	25,000	960	11,000	240	810	780	<1,000	
	12/19/01	27,000	750	12,000	360	510	480	790	
	3/20/02	20,000	1,400	16,000	1,300	980	1,310	810	
	6/20/02	23,000	750	11,000	350	540	330	960	
	9/20/02	<50,000	570	12,000	<500	510	<1,000	1,500	
	12/31/02	21,000	440	8,200	270	340	340	2,300	
	3/25/03	32,000	1,900	14,000	1,100	900	1,170	1,000	
	7/1/03	19,000	960	14,000	440	550	414	1,400	
	10/2/03	21,000	1,200	12,000	130	450	163	1,900	
	12/9/03	3,300	190	1,500	18	44	24	280	
	3/2/04	840	<50	500	38	40	42	47	
	6/8/04	1,000	110	500	<5	55	11	<10	
	9/14/04	<50	<50	<0.5	<0.5	<0.5	<1.5	1	
	12/28/04	---	---	---	---	---	---	---	Well was inaccessible.
	3/29/05	6,300	700	1,200	160	180	379	29	
	6/27/05	6,000	270	1,400	90	220	375	28	
	9/27/05	1,400	100	290	15	77	116	3.1	
	12/14/05	520	<50	120	29	17	32	170	
	4/3/06	640	<50	200	14	36	66	<5.0	96ppb hydrocarbons in the C8-C18 range reported in the diesel analysis. No diesel pattern was present.

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		<----- ppb ----->							
MW-7	9/18/98	<50	3,000	<0.5	<0.5	<0.5	<1.0	<1	Sample was flagged. See analytical report for details
	1/4/99	4,200	<50	1,900	81	160	280	35	
	3/10/99	9,800	<50	<0.50	70	150	390	18	
	6/30/99	13,000	78	3,000	320	320	670	<125	
	10/1/99	7,800	2,600	2,700	140	220	420	<100	Sample was flagged. See analytical report for details
	1/5/00	14,000	<50	4,500	120	300	650	<50	
	3/29/00	14,000	360	4,100	94	360	220	<50	Sample was flagged. See analytical report for details
	7/11/00	8,500	560	3,000	53	270	220	12	Sample was flagged. See analytical report for details
	9/29/00	15,000	<50	3,700	41	290	360	<25	
	12/7/00	7,000	<50	1,300	83	160	280	<25	
	3/6/01	13,000	1,200	4,600	110	510	850	<2.0	
	6/21/01	12,000	660	2,800	95	350	590	<500	
	9/18/01	2,600	140	1,000	36	85	110	<50	
	12/19/01	9,300	600	3,800	76	450	370	<50	
	3/20/02	—	—	—	—	—	—	—	Well was inaccessible.
	6/20/02	6,800	730	2,600	34	270	112	<20	
	9/20/02	14,000	330	4,800	<125	500	540	7.7	
	12/31/02	9,300	770	2,600	70	240	300	5	
	3/25/03	3,600	470	1,600	10	120	28	41	
	7/1/03	600	52	200	18	22	34	49	
	10/2/03	3,200	480	1,600	23	130	176	31	
	12/9/03	16,000	170	390	17	24	45	24	
	3/2/04	4,100	330	1,300	9	47	29	17	
	6/8/04	2,000	110	860	16	47	46	<10	
	9/14/04	5,000	110	980	23	84	58.8	6	
	12/28/04	6,000	920	1,800	27	68	61.1	3.7	
	3/29/05	1,600	100	350	5	22	8	2	
	6/28/05	840	<50	180	11	18	17	1.7	
	9/27/05	2,300	62	670	17	41	30.4	1.4	
	12/14/05	3,400	<50	1,500	50	64	59	3.1	Lab noted benzene result may be biased high.
	4/3/06	9,100	<50	4,200	140	150	140	<100	500ppb higher boiling gasoline compounds reported in the diesel analysis. No diesel pattern was present.

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		<----- ppb ----->							
MW-8	9/18/98	<50	<50	3	1	<0.5	<1.0	<1	
	1/4/99	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	3/10/99	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	6/30/99	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	10/1/99	<50	<50	<0.5	<0.5	<0.5	1.2	<5.0	
	1/5/00	220	<50	7.1	0.7	0.5	1.7	<2.0	
	3/29/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
	7/11/00	76	<50	4.6	<0.5	<0.5	0.5	<0.5	
	9/29/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
	12/7/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
	3/6/01	<50	<50	2.8	<0.5	<0.5	<0.5	<2.0	
	6/21/01	<50	52	6	2.3	1.1	2.6	<5.0	
	9/18/01	<50	<50	<0.5	0.62	<0.5	<0.5	<5.0	
	12/19/01	51	84	6	0.8	0.9	2.6	<5	
	3/20/02	<50	<50	<1	<1	<1	<1	<1	
	6/20/02	78	<50	18	5	4	7	4	
	9/20/02	<50	<50	<0.5	<0.5	<0.5	<1	<5	
	12/31/02	61	200	13	2.2	2.1	4.6	<1	
	3/25/03	55	<50	16	3	1	5	<1	
	7/1/03	<50	<50	11	2	2	4	<1	
	10/2/03	<50	<50	<1	<1	<1	<1	<1	
	12/9/03	71	<50	10	5	2	8	<1	
	3/2/04	69	<50	5	13	2	13	1	
	6/8/04	<25	<50	<0.5	0.6	<0.5	<1	<1	
	9/14/04	<50	<50	3.3	1.4	0.7	3	<0.5	
	12/28/04	<50	<50	<0.5	<0.5	<0.5	<1.5	<0.5	
	3/29/05	<100	<50	3.1	<0.5	0.5	<1.5	1.9	
	6/27/05	590	<50	100	47	16	61	2.8	
	9/27/05	<100	<50	4.9	3.9	1.9	9.1	1.0	
	12/14/05	<100	<50	20	7.1	1.4	5.3	0.7	
	4/3/06	130	<50	77	11	6.4	24	<2.0	

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		<-----	ppb	----->					
MW-9	7/11/00	92	<50	6.4	<0.5	1.2	1	<0.5	
	9/29/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
	12/7/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
	3/6/01	<50	<50	1.1	<0.5	<0.5	<0.5	<2.0	
	6/21/01	67	<50	0.61	0.53	<0.5	<0.5	<5.0	
	9/18/01	<50	<50	1.4	0.63	<0.5	<0.5	<5.0	
	12/19/01	<50	<50	4.7	0.74	0.66	1.9	<5	
	3/20/02	110	<50	35	8	4	7	<1	
	6/20/02	99	<50	25	5	5	8	5	
	9/20/02	<50	<50	18	0.8	1.5	<1	<5	
	12/31/02	54	220	11	3.4	1.9	5.1	<1	
	3/25/03	57	<50	15	4	2	6	<1	
	7/1/03	63	<50	24	4	3	7	<1	
	10/2/03	<50	<50	12	<1	<1	<1	<1	
	12/9/03	53	<50	6	6	2	9	<1	
	3/2/04	83	<50	6	15	2	15	1	
	6/8/04	<25	<50	<0.5	0.6	<0.5	<1	<1	
	9/14/04	<50	<50	2	3	1.2	5.9	<0.5	
	12/28/04	<50	<50	<0.5	<5	<0.5	<1.0	<0.5	
	3/29/05	<100	<50	0.9	<0.5	<0.5	<1.5	<0.5	
	6/28/05	100	<50	7.1	4.7	2.1	7.7	<0.5	
	9/27/05	<100	<50	2.5	3.7	1.9	9.1	<0.5	
	12/14/05	<100	<50	12	9.5	1.1	6.0	0.7	
	4/3/06	<50	<50	7.8	2.0	1.9	7.5	<1.0	

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		<-----	ppb	----->					
MW-10	7/11/00	<50	<50	1.5	<0.5	<0.5	<0.5	8.1	
	9/29/00	<50	<50	<0.5	<0.5	<0.5	<0.5	12	
	12/7/00	<50	<50	<0.5	<0.5	<0.5	<0.5	13	
	3/6/01	110	<50	20	1.2	0.82	0.75	12	
	6/21/01	57	<50	6.3	1.5	0.78	1.2	34	
	9/18/01	59	<50	7	1.1	0.6	1.2	39	
	12/19/01	60	80	7.5	0.68	0.56	1	47	
	3/20/02	82	<250	23	7	3	7	26	
	6/20/02	150	<50	47	7	6	8	60	
	9/20/02	380	<50	160	2.7	12	11	66	
	12/31/02	140	<50	37	3.9	2.5	5.6	64	
	3/25/03	110	<50	38	6	3	8	63	
	7/1/03	77	<50	29	4	3	7	71	
	10/2/03	58	<50	29	<1	<1	<1	110	
	12/9/03	67	<50	8	8	2	10	96	
	3/2/04	82	<50	6	13	2	14	83	
	6/8/04	35	<50	<0.5	0.5	<0.5	<1	54	
	9/14/04	<50	<50	<0.5	<0.5	<0.5	<1.5	35	
	12/28/04	<50	<50	44	<0.5	<0.5	0.89	<0.5	
	3/29/05	<100	<50	3.1	1.0	1.1	1.7	29	
	6/28/05	100	<50	8.1	5.5	2.2	8.3	41	
	9/27/05	110	<50	3.6	7.8	2.5	15.3	33	
	12/14/05	<100	<50	18	14	1.2	6.4	42	
	4/3/06	90	<50	33	4.6	3.8	14	51	

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		<----- ppb ----->							
MW-11	7/11/00	3,000	770	260	48	8.3	550	12	Sample was flagged. See analytical report for details
	9/29/00	8,500	<50	1,400	9.6	280	760	33	
	12/7/00	3,300	<50	340	6.9	70	240	<2.5	
	3/6/01	540	<50	220	2.5	2.7	7.8	<2.0	
	6/21/01	930	170	250	9.1	41	44	<25	
	9/18/01	1,200	160	290	12	83	120	<25	
	12/19/01	140	140	34	1.5	2.4	3.6	<5	
	3/20/02	<50	<50	<1	<1	<1	<1	<1	
	6/20/02	140	<50	37	5	5	7	6	
	9/20/02	64	<50	32	1.2	1.9	1.3	<5	
	12/31/02	53	<50	17	2.9	1.9	4.4	<1	
	3/25/03	97	<125	29	5	2	8	<1	
	7/1/03	51	<50	16	3	2	7	<1	
	10/2/03	<50	<50	15	<1	<1	<1	<1	
	12/9/03	69	<50	8	8	2	10	<1	
	3/2/04	92	<50	8	15	3	15	1	
	6/8/04	<25	<50	1.1	<0.5	<0.5	<1	<1	
	9/14/04	<50	<50	<0.5	<0.5	<0.5	<1.5	<0.5	
	12/28/04	<50	<50	3	<5.0	0.69	1	<0.5	
	3/29/05	<100	<50	2.3	0.6	0.7	1.1	<0.5	
	6/28/05	<100	<50	6.5	4.6	1.9	7.3	<0.5	
	9/27/05	<100	<50	2.6	6.6	2.2	13.2	<0.5	
	12/14/05	<100	<50	14	11	1.2	6.1	0.9	
	4/3/06	<50	<50	12	2.5	2.4	9.3	<1.0	

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		<----- ppb ----->							
MW-12	7/11/00	3,400	340	710	46	78	70	3.3	Sample was flagged. See analytical report for details
	9/29/00	3,500	<50	1,100	8.8	100	4.2	4.7	
	12/7/00	---	---	---	---	---	---	---	Well was inaccessible.
	3/6/01	---	---	---	---	---	---	---	Well was inaccessible.
	6/21/01	620	84	210	4	8	<2.5	<25	
	9/18/01	76	<50	17	1.6	0.99	2.1	11	
	12/19/01	88	97	23	1.7	1.3	2.6	22	
	3/20/02	540	<50	170	12	8	12	8	
	6/20/02	320	62	92	8	7	8	14	
	9/20/02	<250	—	76	<2.5	3.4	<5	36	
	12/31/02	—	—	—	—	—	—	—	Well was inaccessible.
	3/25/03	1,600	100	540	15	50	15	8	
	7/1/03	2,100	120	680	21	110	24	6	
	10/2/03	150	<50	57	<1	1	<1	27	
	12/9/03	340	<50	87	10	3	12	14	
	3/2/04	1,100	69	270	20	6	21	7	
	6/8/04	47	<50	<0.5	<0.5	<0.5	<1	1.5	
	9/14/04	<50	<50	<0.5	<0.5	<0.5	<1.5	2	
	12/28/04	<50	80	<0.5	<0.5	<0.5	<1.5	<0.5	
	3/29/05	580	<50	90	3.1	13	7.7	0.6	
	6/28/05	1,700	<50	460	12	58	13.2	0.9	
	9/27/05	1,800	<50	330	17	9.1	27	1.6	
	12/14/05	<100	<50	14	9.9	1.1	6.1	2.3	
	4/3/06	<50	<50	1.6	0.97	<0.50	2.5	<1.0	

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		<----- ppb ----->							
MW-13	8/8/00	53,000	<50	3,700	5,600	1,400	7,200	ND	
	9/29/00	11,000	<50	890	350	900	800	<5.0	
	12/7/00	1,200	<50	170	7.5	7.7	26	<2.5	
	3/6/01	1,000	<50	480	30	19	110	<2.0	
	6/21/01	750	110	260	10	20	14	<25	
	9/18/01	1,700	160	520	110	65	110	<50	
	12/19/01	6,500	98	570	380	130	720	<5	
	3/20/02	210	<250	34	2	<1	6	<1	
	6/20/02	420	<250	130	63	15	46	10	
	9/20/02	100	<50	36	1.5	4	2.2	<5	
	12/31/02	2,600	320	410	170	84	240	<1	
	3/25/03	270	<125	160	32	18	42	<1	
	7/1/03	220	<50	58	15	8	23	<1	
	10/2/03	410	<50	120	23	22	49	<1	
	12/9/03	490	<50	100	12	15	47	<1	
	3/2/04	530	<50	140	40	12	49	2	
	6/8/04	47	<50	9.8	<0.5	0.7	<1	<1	
	9/14/04	540	<50	99	15	13	28.9	<0.5	
	12/28/04	110	<50	45	<0.5	<0.5	0.92	<0.5	
	3/29/05	110	<50	22	1.3	2.2	2.8	<0.5	
	6/28/05	1,700	<50	640	42	74	150	<0.5	
	9/27/05	160	<50	19	7.5	4.0	15.3	<0.5	
	12/14/05	120	<50	25	11	2.2	8.7	0.8	
	4/3/06	1,300	<50	490	150	72	240	<10	410 ppb higher boiling gasoline compounds reported in the diesel analysis. No diesel pattern was present.

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		<----- ppb ----->							
MW-14	3/20/02	8,100	2,300	200	20	2	1,700	6	
	6/20/02	530	<50	100	19	15	27	52	
	9/20/02	720	98	180	29	19	34	75	
	12/31/02	900	96	130	58	22	55	140	
	3/25/03	590	<125	160	50	21	35	63	
	7/1/03	220	<50	68	11	7	15	52	
	10/2/03	460	740	1,500	190	250	370	25	
	12/9/03	220	<50	53	8	8	13	22	
	3/2/04	2,700	200	1,300	8	180	19	7	
	6/8/04	160	110	43	4.4	7.4	7.3	<1	
	9/14/04	<500	<50	41	3.1	6.5	7.5	<0.5	
	12/28/04	1,100	360	460	4.9	24	5.5	<0.5	
	3/29/05	3,400	240	940	76	82	73	0.6	
	6/28/05	450	<50	72	25	13	32.1	0.8	
	9/27/05	310	<50	58	8.2	8.3	17.4	<0.5	
	12/14/05	260	<50	71	13	5.6	9.6	0.7	
	4/3/06	490	<50	160	47	23	45	<5.0	Sample was flagged. See analytical report for details
MW-15 @ 30'	5/4/05	110,000	250,000	21,000	19,000	1,000	5,700	22,000	
	6/27/05	100,000	320,000	22,000	22,000	940	5,400	23,000	
	9/27/05	77,000	160,000	20,000	18,000	590	3,500	23,000	
	12/13/05	69,000	70,000	18,000	12,000	530	3,200	20,000	
MW-15 @ 60'	5/4/05	920	<50	190	140	9.2	48	59	
	6/27/05	1,900	<50	470	450	26	120	33	
	9/27/05	63,000	200,000	12,000	9,300	500	2,900	20,000	
	12/13/05	2,800	<50	760	490	24	122	140	
MW-15 @ 83'	5/4/05	3,400	<50	580	780	43	210	7.3	
	6/27/05	8,300	<50	1,900	1,500	99	440	68	
	9/27/05	17,000	90	7,200	7,300	290	1,630	280	
	12/13/05	7,300	60	1,800	1,200	87	430	120	

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		<----- ppb ----->							
MW-15 @ 140'	5/4/05	100,000	230,000	20,000	18,000	920	5,200	19,000	
	6/27/05	93,000	240,000	20,000	20,000	1,100	5,300	20,000	
	9/27/05	77,000	190,000	19,000	17,000	590	3,500	22,000	
	12/13/05	73,000	73,000	23,000	16,000	820	4,800	22,000	
<hr/>									
MW-16	5/3/05	<100	<50	1.1	1.0	1.0	4.2	120	
	6/27/05	460	<50	80	37	12	44	83	
	9/27/05	<100	<50	5.0	5.3	2.7	12.7	41	
	12/14/05	120	<50	30	16	1.7	8.3	27	
	4/3/06	76	<50	22	3.8	3.2	12	31	
<hr/>									
MW-17	5/3/05	<100	<50	0.6	0.7	0.9	3.7	32	
	6/28/05	110	<50	15	8.8	2.7	11.4	35	
	9/27/05	<100	<50	2.3	4.8	2.2	11.5	4.5	
	12/14/05	<100	<50	21	13	1.4	7.3	3.9	
	4/3/06	<50	<51	13	2.7	2.4	9.2	17	
<hr/>									
DW-1020	6/30/99	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	10/1/99	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	1/5/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	2/8/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	3/28/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
	4/21/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	5/26/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
	6/26/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	7/21/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	8/29/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	9/29/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	10/3/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	12/7/00	140	<50	<0.5	0.58	<0.5	1.3	2	Sample was flagged. See analytical report for details
	12/29/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	1/5/01	<50	---	<0.5	<0.5	<0.5	<0.5	<2.0	Sample analyzed by Sparger Technology Inc
	1/5/01	<50	---	<0.5	<0.5	<0.5	<0.5	<5.0	Sample analyzed by Entech Analytical Labs Inc
	1/29/01	<50	---	<0.5	<0.5	<0.5	<0.5	<5.0	Sample was flagged. See analytical report for details
	2/9/01	<50	89	<0.5	<0.5	<0.5	<0.5	<5.0	

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		<-----	ppb ----->						
DW-1020	2/22/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	2/28/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	3/6/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	4/6/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	5/14/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	6/21/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	7/13/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	8/22/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	9/18/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	10/8/01	<50	160	<0.5	<0.5	<0.5	<0.5	<5	
	11/20/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	
	12/19/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	
	1/15/02	<50	<250	<1	<1	<1	<1	<1	
	2/14/02	<50	<50	<0.50	<0.50	<0.50	<0.50	<2.0	
	3/20/02	<50	<50	<1	<1	<1	<1	<1	
	4/11/02	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	
	5/15/02	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	
	6/20/02	<50	<50	<1	<1	<1	<1	<1	
	7/10/02	<50	<50	<0.5	<0.5	<0.5	<1	<5	
	8/8/02	<50	<50	<0.5	<0.5	<0.5	<1	<5	
	9/20/02	<50	<50	<0.5	<0.5	<0.5	<1	<5	
	12/31/02	<50	<50	<0.5	<0.5	<0.5	<1	<1	
	3/25/03	<250	<125	<1	<1	<1	<1	<1	
	7/1/03	<50	<50	<1	<1	<1	<1	<1	
	10/2/03	<50	<50	<1	<1	<1	<1	<1	
	12/9/03	<50	<50	<1	<1	<1	<1	<1	
	3/2/04	<50	77	<1	<1	<1	<1	<1	
	6/8/04	<25	<50	<0.5	<0.5	<0.5	<1	<1	
	9/14/04	<50	<50	<0.5	<0.5	<0.5	<1.5	<0.5	
	12/28/04	<50	<50	<0.5	<0.5	<0.5	<1.5	<0.5	
	3/29/05	<100	<50	<0.5	<0.5	<0.5	<1.5	<0.5	
	6/27/05	<100	<50	0.6	0.9	<0.5	<1.5	<0.5	
	7/25/05	<100	---	<0.5	<0.5	<0.5	<1.5	<0.5	
	9/27/05	<100	<50	<0.5	<0.5	<0.5	<1.5	<0.5	

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		<-----	ppb	----->					
DW-1020	12/14/05	<100	<50	<0.5	<0.5	<0.5	<1.5	<0.5	
	4/3/06	<50	<51	<0.50	<0.50	<0.50	<0.50	<1.0	

Explanation TPH(G) = Total Petroleum Hydrocarbons as Gasoline

TPH(D) = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert butyl ether

ppb = parts per billion

Table 3. Analytical Results for Ground Water - Oxygenates - Redwood Oil Service Station, 1100 Bennett Valley Road, Santa Rosa, California

Sample ID	Sample Date	t-Butyl alcohol (TBA)	Methyl t-butyl ether (MTBE)	Diisopropyl ether (DIPE)	Ethyl t-butyl ether (ETBE)	t-Amyl methyl ether (TAME)	Notes
		<-----ppb----->					
MW-4	9/18/98	ND	5,900	ND	ND	ND	
	1/4/99	ND	7,800	ND	ND	ND	
	3/10/99	ND	3,600	ND	ND	ND	
	6/30/99	ND	3,000	ND	ND	ND	
	10/1/99	---	---	---	---	---	
	1/5/00	ND	6,000	ND	ND	ND	
	3/29/00	ND	9,000	ND	ND	ND	
	7/11/00	ND	5,100	ND	ND	ND	
	9/29/00	ND	3,900	ND	ND	ND	
	12/7/00	ND	1,300	ND	ND	ND	
	3/6/01	620	860	ND	ND	ND	
	6/21/01	ND	340	ND	ND	ND	
	9/18/01	ND	730	ND	ND	ND	
	12/19/01	ND	1,500	ND	ND	ND	
	3/20/02	ND	200	ND	ND	1	
	6/20/02	ND	87	ND	ND	ND	
	9/20/02	220	720	ND	ND	ND	
	12/31/02	40	77	ND	ND	ND	
	3/25/03	<200	3	<1	<1	<1	
	7/1/03	<200	10	<1	<1	<1	
	10/2/03	<200	2	<1	<1	<1	
	12/9/03	8	47	<1	<1	<1	
	3/2/04	10	49	<1	<1	<1	
	6/8/04	<1	<1	<1	<1	<1	
	9/14/04	44	37	<0.5	<0.5	<0.5	
	12/28/04	460	1,300	<1	<1	13	
	3/29/05	51	180	<0.5	<0.5	1.8	
	6/27/05	59	130	<0.5	<0.5	0.7	
	9/27/05	380	210	<0.5	<0.5	1.6	
	12/14/05	360	130	<0.5	<0.5	0.9	
	4/3/06	140	130	<10	<10	<10	

Table 3. Analytical Results for Ground Water - Oxygenates - Redwood Oil Service Station, 1100 Bennett Valley Road, Santa Rosa, California

Sample ID	Sample Date	t-Butyl alcohol (TBA)	Methyl t-butyl ether (MTBE)	Diisopropyl ether (DIPE)	Ethyl t-butyl ether (ETBE)	t-Amyl methyl ether (TAME)	Notes
		<-----ppb----->					
MW-5	9/18/98	ND	15,000	ND	ND	ND	
	1/4/99	ND	8,400	ND	ND	ND	
	3/10/99	ND	6,800	ND	ND	ND	
	6/30/99	ND	4,900	ND	ND	ND	
	10/1/99	---	---	---	---	---	
	1/5/00	ND	8,000	ND	ND	ND	
	3/29/00	ND	6,500	ND	ND	ND	
	7/11/00	ND	6,500	ND	ND	ND	
	9/29/00	ND	7,700	ND	ND	ND	
	12/7/00	ND	6,500	ND	ND	ND	
	3/6/01	1,200	2,300	ND	ND	ND	
	6/21/01	ND	6,200	ND	ND	ND	
	9/18/01	ND	3,600	ND	ND	ND	
	12/19/01	1,200	3,300	ND	ND	ND	
	3/20/02	ND	2,200	ND	ND	ND	
	6/20/02	ND	3,200	ND	ND	ND	
	9/20/02	1,000	3,000	ND	ND	ND	
	12/31/02	2,200	2,400	ND	ND	ND	
	3/25/03	1,400	1,600	<1	<1	18	
	7/1/03	1,800	2,200	<1	<1	20	
	10/2/03	910	2,500	<1	<1	23	
	12/9/03	780	1,600	<1	<1	15	
	3/2/04	600	1,000	<1	<1	11	
	6/8/04	<500	1,300	<500	<500	<500	
	9/14/04	1,100	1,100	<0.5	0.61	12	
	12/28/04	900	660	<25	<25	<25	
	3/29/05	590	720	<0.5	<0.5	11	
	6/27/05	980	620	<0.5	<0.5	12	
	9/27/05	810	540	<0.5	<0.5	10	
	12/14/05	710	490	<0.5	<0.5	7.2	
	4/3/06	<5,000	<500	<2,500	<2,500	<2,500	

Table 3. Analytical Results for Ground Water - Oxygenates - Redwood Oil Service Station, 1100 Bennett Valley Road, Santa Rosa, California

Sample ID	Sample Date	t-Butyl alcohol (TBA)	Methyl t-butyl ether (MTBE)	Diisopropyl ether (DIPE)	Ethyl t-butyl ether (ETBE)	t-Amyl methyl ether (TAME)	Notes
		<-----ppb----->					
MW-6	9/18/98	ND	10	ND	ND	ND	
	1/4/99	ND	180	ND	ND	ND	
	3/10/99	ND	91	ND	ND	ND	
	6/30/99	ND	120	ND	ND	ND	
	10/1/99	ND	<250	ND	ND	ND	
	1/5/00	ND	260	ND	ND	ND	
	3/29/00	ND	<50	ND	ND	ND	
	7/13/00	ND	<13	ND	ND	ND	
	9/29/00	ND	610	ND	ND	ND	
	12/7/008	---	---	---	---	---	
	3/6/01	640	120	ND	ND	ND	
	6/21/01	ND	<1,250	ND	ND	ND	
	9/18/01	ND	<1,000	ND	ND	ND	
	12/19/01	590	790	ND	ND	ND	
	3/20/02	ND	810	ND	ND	ND	
	6/20/02	ND	960	ND	ND	ND	
	9/20/02	1,200	1,500	ND	ND	ND	
	12/31/02	2,200	2,300	ND	ND	ND	
	3/25/03	1,200	1,000	<1	<1	7	
	7/1/03	1,100	1,400	<1	<1	9	
	10/2/03	670	1,900	<1	<1	11	
	12/9/03	130	280	<1	<1	2	
	3/2/04	28	47	<1	<1	1	
	6/8/04	<10	<10	<10	<10	<10	
	9/14/04	<5	1	<0.5	<0.5	<0.5	
	12/28/04	---	---	---	---	---	
	3/29/05	59	29	<0.5	<0.5	<0.5	
	6/27/05	110	28	<0.5	<0.5	<0.5	
	9/27/05	12	3.1	<0.5	<0.5	<0.5	
	12/14/05	31	170	<0.5	<0.5	0.8	
	4/3/06	56	<5.0	<25	<25	<25	

Table 3. Analytical Results for Ground Water - Oxygenates - Redwood Oil Service Station, 1100 Bennett Valley Road, Santa Rosa, California

Sample ID	Sample Date	t-Butyl alcohol (TBA)	Methyl t-butyl ether (MTBE)	Diisopropyl ether (DIPE)	Ethyl t-butyl ether (ETBE)	t-Amyl methyl ether (TAME)	Notes
		<-----ppb----->					
MW-7	9/18/98	ND	<1	ND	ND	ND	
	1/4/99	ND	35	ND	ND	ND	
	3/10/99	ND	18	ND	ND	ND	
	6/30/99	ND	<125	ND	ND	ND	
	10/1/99	ND	<100	ND	ND	ND	
	1/5/00	ND	<50	ND	ND	ND	
	3/29/00	ND	<50	ND	ND	ND	
	7/11/00	ND	12	ND	ND	ND	
	9/29/00	ND	<25	ND	ND	ND	
	12/7/00	ND	<25	ND	ND	ND	
	3/6/01	83	<2.0	ND	ND	7.5	
	6/21/01	ND	<500	ND	ND	ND	
	9/18/01	ND	<50	ND	ND	ND	
	12/19/01	ND	<50	ND	ND	ND	
	3/20/02	ND	---	ND	ND	ND	
	6/20/02	ND	<20	ND	ND	ND	
	9/20/02	130	7.7	ND	ND	ND	
	12/31/02	130	5	ND	ND	ND	
	3/25/03	<200	41	<1	<1	<1	
	7/1/03	<200	49	<1	<1	<1	
	10/2/03	<200	31	<1	<1	<1	
	12/9/03	27	24	<1	<1	<1	
	3/2/04	210	17	<1	<1	<1	
	6/8/04	<10	<10	<10	<10	<10	
	9/14/04	89	6	<0.5	<0.5	<0.5	
	12/28/04	360	3.7	<0.5	<0.5	<0.5	
	3/29/05	110	2	<1	<1	<1	
	6/28/05	47	1.7	<0.5	<0.5	<0.5	
	9/27/05	32	1.4	<0.5	<0.5	<0.5	
	12/14/05	91	3.1	<0.5	<0.5	<0.5	
	4/3/06	<1,000	<100	<500	<500	<500	

Table 3. Analytical Results for Ground Water - Oxygenates - Redwood Oil Service Station, 1100 Bennett Valley Road, Santa Rosa, California

Sample ID	Sample Date	t-Butyl alcohol (TBA)	Methyl t-butyl ether (MTBE)	Diisopropyl ether (DIPE)	Ethyl t-butyl ether (ETBE)	t-Amyl methyl ether (TAME)	Notes
		<-----ppb----->					
MW-8	9/18/98	ND	<1	ND	ND	ND	
	1/4/99	ND	<5.0	ND	ND	ND	
	3/10/99	ND	<5.0	ND	ND	ND	
	6/30/99	ND	<5.0	ND	ND	ND	
	10/1/99	ND	<5.0	ND	ND	ND	
	1/5/00	ND	<2.0	ND	ND	ND	
	3/29/00	ND	<0.5	ND	ND	ND	
	7/11/00	ND	<0.5	ND	ND	ND	
	9/29/00	ND	<0.5	ND	ND	ND	
	12/7/00	ND	<0.5	ND	ND	ND	
	3/6/01	ND	<2.0	ND	ND	ND	
	6/21/01	ND	<5.0	ND	ND	ND	
	9/18/01	ND	<5.0	ND	ND	ND	
	12/19/01	ND	<5	ND	ND	ND	
	3/20/02	ND	<1	ND	ND	ND	
	6/20/02	ND	4	ND	ND	ND	
	9/20/02	ND	<5	ND	ND	ND	
	12/31/02	ND	<1	ND	ND	ND	
	3/25/03	<200	<1	<1	<1	<1	
	7/1/03	<200	<1	<1	<1	<1	
	10/2/03	<200	<1	<1	<1	<1	
	12/9/03	<5	<1	<1	<1	<1	
	3/2/04	<5	1	<1	<1	<1	
	6/8/04	<1	<1	<1	<1	<1	
	9/14/04	<5	<0.5	<0.5	<0.5	<0.5	
	12/28/04	<5	<0.5	<0.5	<0.5	<0.5	
	3/29/05	<5	1.9	<0.5	<0.5	0.6	
	6/27/05	<5	2.8	<0.5	<0.5	0.8	
	9/27/05	<5	1.0	<0.5	<0.5	<0.5	
	12/14/05	<5	0.7	<0.5	<0.5	<0.5	
	4/3/06	<20	<2.0	<10	<10	<10	

Table 3. Analytical Results for Ground Water - Oxygenates - Redwood Oil Service Station, 1100 Bennett Valley Road, Santa Rosa, California

Sample ID	Sample Date	t-Butyl alcohol (TBA)	Methyl t-butyl ether (MTBE)	Diisopropyl ether (DIPE)	Ethyl t-butyl ether (ETBE)	t-Amyl methyl ether (TAME)	Notes
		<-----ppb----->					
MW-9	7/11/00	ND	<0.5	ND	ND	ND	
	9/29/00	ND	<0.5	ND	ND	ND	
	12/7/00	ND	<0.5	ND	ND	ND	
	3/6/01	ND	<2.0	ND	ND	ND	
	6/21/01	ND	<5.0	ND	ND	ND	
	9/18/01	ND	<5.0	ND	ND	ND	
	12/19/01	ND	<5	ND	ND	ND	
	3/20/02	ND	<1	ND	ND	ND	
	6/20/02	ND	5	ND	ND	ND	
	9/20/02	ND	<5	ND	ND	ND	
	12/31/02	ND	<1	ND	ND	ND	
	3/25/03	<200	<1	<1	<1	<1	
	7/1/03	<200	<1	<1	<1	<1	
	10/2/03	<200	<1	<1	<1	<1	
	12/9/03	<5	<1	<1	<1	<1	
	3/2/04	<5	1	<1	<1	<1	
	6/8/04	<1	<1	<1	<1	<1	
	9/14/04	<5	<0.5	<0.5	<0.5	<0.5	
	12/28/04	<5	<0.5	<0.5	<0.5	<0.5	
	3/29/05	<5	<0.5	<0.5	<0.5	<0.5	
	6/28/05	<5	<0.5	<0.5	<0.5	<0.5	
	9/27/05	<5	<0.5	<0.5	<0.5	<0.5	
	12/14/05	<5	0.7	<0.5	<0.5	<0.5	
	4/3/06	<10	<1.0	<5.0	<5.0	<5.0	

Table 3. Analytical Results for Ground Water - Oxygenates - Redwood Oil Service Station, 1100 Bennett Valley Road, Santa Rosa, California

Sample ID	Sample Date	t-Butyl alcohol (TBA)	Methyl t-butyl ether (MTBE)	Diisopropyl ether (DIPE)	Ethyl t-butyl ether (ETBE)	t-Amyl methyl ether (TAME)	Notes
		<-----ppb----->					
MW-10	7/11/00	ND	8.1	ND	ND	ND	
	9/29/00	ND	12	ND	ND	ND	
	12/7/00	ND	13	ND	ND	ND	
	3/6/01	ND	12	ND	ND	ND	
	6/21/01	ND	34	ND	ND	ND	
	9/18/01	ND	39	ND	ND	ND	
	12/19/01	ND	47	ND	ND	ND	
	3/20/02	ND	26	ND	ND	ND	
	6/20/02	ND	60	ND	ND	ND	
	9/20/02	ND	66	ND	ND	ND	
	12/31/02	16	64	ND	ND	ND	
	3/25/03	<200	63	<1	<1	<1	
	7/1/03	<200	71	<1	<1	<1	
	10/2/03	<200	110	<1	<1	<1	
	12/9/03	<5	96	<1	<1	<1	
	3/2/04	<5	83	<1	<1	<1	
	6/8/04	<1	54	<1	<1	<1	
	9/14/04	11	35	<0.5	<0.5	<0.5	
	12/28/04	<5	<0.5	<0.5	<0.5	<0.5	
	3/29/05	<5	29	<1	<1	<1	
	6/28/05	<5	41	<0.5	<0.5	<0.5	
	9/27/05	<5	33	<0.5	<0.5	<0.5	
	12/14/05	<5	42	<0.5	<0.5	<0.5	
	4/3/06	<10	51	<5.0	<5.0	<5.0	

Table 3. Analytical Results for Ground Water - Oxygenates - Redwood Oil Service Station, 1100 Bennett Valley Road, Santa Rosa, California

Sample ID	Sample Date	t-Butyl alcohol (TBA)	Methyl t-butyl ether (MTBE)	Diisopropyl ether (DIPE)	Ethyl t-butyl ether (ETBE)	t-Amyl methyl ether (TAME)	Notes
		<-----ppb----->					
MW-11	7/11/00	ND	12	ND	ND	ND	
	9/29/00	ND	33	ND	ND	ND	
	12/7/00	ND	<2.5	ND	ND	ND	
	3/6/01	ND	<2.0	ND	ND	ND	
	6/21/01	ND	<25	ND	ND	ND	
	9/18/01	ND	<25	ND	ND	ND	
	12/19/01	ND	<5	ND	ND	ND	
	3/20/02	ND	<1	ND	ND	ND	
	6/20/02	ND	6	ND	ND	ND	
	9/20/02	ND	<5	ND	ND	ND	
	12/31/02	ND	<1	ND	ND	ND	
	3/25/03	<200	<1	<1	<1	<1	
	7/1/03	<200	<1	<1	<1	<1	
	10/2/03	<200	<1	<1	<1	<1	
	12/9/03	<5	<1	<1	<1	<1	
	3/2/04	<5	1	<1	<1	<1	
	6/8/04	<1	<1	<1	<1	<1	
	9/14/04	<5	<0.5	<0.5	<0.5	<0.5	
	12/28/04	<5	<0.5	<0.5	<0.5	<0.5	
	3/29/05	<5	<0.5	<0.5	<0.5	<0.5	
	6/28/05	<5	<0.5	<0.5	<0.5	<0.5	
	9/27/05	<5	<0.5	<0.5	<0.5	<0.5	
	12/14/05	<5	0.9	<0.5	<0.5	<0.5	
	4/3/06	<10	<1.0	<5.0	<5.0	<5.0	

Table 3. Analytical Results for Ground Water - Oxygenates - Redwood Oil Service Station, 1100 Bennett Valley Road, Santa Rosa, California

Sample ID	Sample Date	t-Butyl alcohol (TBA)	Methyl t-butyl ether (MTBE)	Diisopropyl ether (DIPE)	Ethyl t-butyl ether (ETBE)	t-Amyl methyl ether (TAME)	Notes
		<-----ppb----->					
MW-12	7/11/00	ND	3.3	ND	ND	ND	
	9/29/00	ND	4.7	ND	ND	ND	
	12/7/00	ND	---	ND	ND	ND	
	3/6/01	ND	---	ND	ND	ND	
	6/21/01	ND	<25	ND	ND	ND	
	9/18/01	ND	11	ND	ND	ND	
	12/19/01	ND	22	ND	ND	ND	
	3/20/02	ND	8	ND	ND	ND	
	6/20/02	ND	14	ND	ND	ND	
	9/20/02	ND	36	ND	ND	ND	
	12/31/02	ND	---	ND	ND	ND	
	3/25/03	<200	8	<1	<1	<1	
	7/1/03	<200	6	<1	<1	<1	
	10/2/03	<200	27	<1	<1	<1	
	12/9/03	<5	14	<1	<1	<1	
	3/2/04	9	7	<1	<1	<1	
	6/8/04	<1	1.5	<1	<1	<1	
	9/14/04	<5	2	<0.5	<0.5	<0.5	
	12/28/04	<5	<0.5	<0.5	<0.5	<0.5	
	3/29/05	<5	0.6	<0.5	<0.5	<0.5	
	6/28/05	8	0.9	<0.5	<0.5	<0.5	
	9/27/05	8.1	1.6	<0.5	<0.5	0.75	
	12/14/05	<5	2.3	<0.5	<0.5	<0.5	
	4/3/06	<10	<1.0	<5.0	<5.0	<5.0	

Table 3. Analytical Results for Ground Water - Oxygenates - Redwood Oil Service Station, 1100 Bennett Valley Road, Santa Rosa, California

Sample ID	Sample Date	t-Butyl alcohol (TBA)	Methyl t-butyl ether (MTBE)	Diisopropyl ether (DIPE)	Ethyl t-butyl ether (ETBE)	t-Amyl methyl ether (TAME)	Notes
		<-----ppb----->					
MW-13	8/8/00	ND	ND	ND	ND	ND	
	9/29/00	ND	<5.0	ND	ND	ND	
	12/7/00	ND	<2.5	ND	ND	ND	
	3/6/01	ND	<2.0	ND	ND	ND	
	6/21/01	ND	<25	ND	ND	ND	
	9/18/01	ND	<50	ND	ND	ND	
	12/19/01	21	<5	ND	ND	ND	
	3/20/02	ND	<1	ND	ND	ND	
	6/20/02	ND	10	ND	ND	ND	
	9/20/02	ND	<5	ND	ND	ND	
	12/31/02	21	<1	ND	ND	ND	
	3/25/03	<200	<1	<1	<1	<1	
	7/1/03	<200	<1	<1	<1	<1	
	10/2/03	<200	<1	<1	<1	<1	
	12/9/03	<5	<1	<1	<1	<1	
	3/2/04	6	2	<1	<1	<1	
	6/8/04	<1	<1	<1	<1	<1	
	9/14/04	<5	<0.5	<0.5	<0.5	<0.5	
	12/28/04	<5	<0.5	<0.5	<0.5	<0.5	
	3/29/05	<5	<0.5	<0.5	<0.5	<0.5	
	6/28/05	17	<0.5	<0.5	<0.5	<0.5	
	9/27/05	<5	<0.5	<0.5	<0.5	<0.5	
	12/14/05	<5	0.8	<0.5	<0.5	<0.5	
	4/3/06	<100	<10	<50	<50	<50	

Table 3. Analytical Results for Ground Water - Oxygenates - Redwood Oil Service Station, 1100 Bennett Valley Road, Santa Rosa, California

Sample ID	Sample Date	t-Butyl alcohol (TBA)	Methyl t-butyl ether (MTBE)	Diisopropyl ether (DIPE)	Ethyl t-butyl ether (ETBE)	t-Amyl methyl ether (TAME)	Notes
		<-----ppb----->					
MW-14	3/20/02	ND	6	ND	ND	ND	
	6/20/02	ND	52	ND	ND	ND	
	9/20/02	32	75	ND	ND	ND	
	12/31/02	86	140	ND	ND	ND	
	3/25/03	<200	63	<1	<1	<1	
	7/1/03	<200	52	<1	<1	<1	
	10/2/03	<200	25	<1	<1	<1	
	12/9/03	11	22	<1	<1	<1	
	3/2/04	61	7	<1	<1	<1	
	6/8/04	<1	<1	<1	<1	<1	
	9/14/04	<5	<0.5	<0.5	<0.5	<0.5	
	12/28/04	14	<0.5	<0.5	<0.5	<0.5	
	3/29/05	25	0.6	<0.5	<0.5	<0.5	
	6/28/05	9	0.8	<0.5	<0.5	<0.5	
	9/27/05	5.2	<0.5	<0.5	<0.5	<0.5	
	12/14/05	7.4	0.7	<0.5	<0.5	<0.5	
	4/3/06	<50	<5.0	<25	<25	<25	
MW-15 @ 30'	5/4/05	2,100	22,000	5	<5	59	
	5/27/05	2,600	23,000	0.8	5.5	50	
	9/27/05	1,600	23,000	<0.5	6.3	46	
	12/13/05	2,700	20,000	0.9	6.3	38	
MW-15 @ 60'	5/4/05	7	59	<0.5	<0.5	0.6	
	5/27/05	<5	33	<0.5	<0.5	<0.5	
	9/27/05	2,500	20,000	<0.5	4.6	35	
	12/13/05	11	140	<0.5	<0.5	0.6	
MW-15 @ 83'	5/4/05	<5	7.3	<0.5	<0.5	0.6	
	5/27/05	<5	68	<0.5	<0.5	<0.5	
	9/27/05	<5	280	<0.5	<0.5	1.1	
	12/13/05	8.0	120	<0.5	<0.5	0.8	

Table 3. Analytical Results for Ground Water - Oxygenates - Redwood Oil Service Station, 1100 Bennett Valley Road, Santa Rosa, California

Sample ID	Sample Date	t-Butyl alcohol (TBA)	Methyl t-butyl ether (MTBE)	Diisopropyl ether (DIPE)	Ethyl t-butyl ether (ETBE)	t-Amyl methyl ether (TAME)	Notes
		<-----ppb----->					
MW-15 @ 140'	5/4/05	2,100	19,000	<5	<5	52	
	5/27/05	2,500	20,000	<5	<5	55	
	9/27/05	1,500	22,000	<0.5	5.1	51	
	12/13/05	5,600	22,000	0.8	5.8	40	
MW-16	5/3/05	51	120	<0.5	<0.5	0.6	
	6/27/05	93	83	<0.5	<0.5	<0.5	
	9/27/05	11	41	<0.5	<0.5	<0.5	
	12/14/05	<5	27	<0.5	<0.5	<0.5	
	4/3/06	<10	31	<5.0	<5.0	<5.0	
MW-17	5/3/05	<5	32	<0.5	<0.5	<0.5	
	6/28/05	<5	35	<0.5	<0.5	<0.5	
	9/27/05	<5	4.5	<0.5	<0.5	<0.5	
	12/14/05	<5	3.9	<0.5	<0.5	<0.5	
	4/3/06	<10	17	<5.0	<5.0	<5.0	
DW-1020	6/30/99	ND	<5.0	ND	ND	ND	
	10/1/99	ND	<5.0	ND	ND	ND	
	1/5/00	ND	<5.0	ND	ND	ND	
	2/8/00	ND	<2.0	ND	ND	ND	
	3/28/00	ND	<0.5	ND	ND	ND	
	4/21/00	ND	<2.0	ND	ND	ND	
	5/26/00	ND	<0.5	ND	ND	ND	
	6/26/00	ND	<2.0	ND	ND	ND	
	7/21/00	ND	<2.0	ND	ND	ND	
	8/29/00	ND	<2.0	ND	ND	ND	
	9/29/00	ND	<2.0	ND	ND	ND	
	10/3/00	ND	<2.0	ND	ND	ND	
	12/7/00	ND	2	ND	ND	ND	
	12/29/00	ND	<2.0	ND	ND	ND	
	1/5/01	ND	<2.0	ND	ND	ND	
	1/5/01	ND	<5.0	ND	ND	ND	
	1/29/01	ND	<5.0	ND	ND	ND	

Table 3. Analytical Results for Ground Water - Oxygenates - Redwood Oil Service Station, 1100 Bennett Valley Road, Santa Rosa, California

Sample ID	Sample Date	t-Butyl alcohol (TBA)	Methyl t-butyl ether (MTBE)	Diisopropyl ether (DIPE)	Ethyl t-butyl ether (ETBE)	t-Amyl methyl ether (TAME)	Notes
		<-----ppb----->					
DW-1020 cont.	2/9/01	ND	<5.0	ND	ND	ND	
	2/22/01	ND	<2.0	ND	ND	ND	
	2/28/01	ND	<5.0	ND	ND	ND	
	3/6/01	ND	<2.0	ND	ND	ND	
	4/6/01	ND	<5.0	ND	ND	ND	
	5/14/01	ND	<5.0	ND	ND	ND	
	6/21/01	ND	<5.0	ND	ND	ND	
	7/13/01	ND	<5.0	ND	ND	ND	
	8/22/01	ND	<5.0	ND	ND	ND	
	9/18/01	ND	<5.0	ND	ND	ND	
	10/8/01	ND	<5	ND	ND	ND	
	11/20/01	ND	<5	ND	ND	ND	
	12/19/01	ND	<5	ND	ND	ND	
	1/15/02	ND	<1	ND	ND	ND	
	2/14/02	ND	<2.0	ND	ND	ND	
	3/20/02	ND	<1	ND	ND	ND	
	4/11/02	ND	<5	ND	ND	ND	
	5/15/02	ND	<5	ND	ND	ND	
	6/20/02	ND	<1	ND	ND	ND	
	7/10/02	ND	<5	ND	ND	ND	
	8/8/02	ND	<5	ND	ND	ND	
	9/20/02	ND	<5	ND	ND	ND	
	12/31/02	ND	<1	ND	ND	ND	
	3/25/03	<200	<1	<1	<1	<1	
	7/1/03	<200	<1	<1	<1	<1	
	10/2/03	<200	<1	<1	<1	<1	
	12/9/03	<5	<1	<1	<1	<1	
	3/2/04	<5	<1	<1	<1	<1	
	6/8/04	<1	<1	<1	<1	<1	
	9/14/04	<5	<0.5	<0.5	<0.5	<0.5	
	12/28/04	<5	<0.5	<0.5	<0.5	<0.5	
	3/29/05	<5	<0.5	<0.5	<0.5	<0.5	
	6/27/05	<5	<0.5	<0.5	<0.5	<0.5	
	7/25/05	<5	<0.5	<0.5	<0.5	<0.5	

Table 3. Analytical Results for Ground Water - Oxygenates - Redwood Oil Service Station, 1100 Bennett Valley Road, Santa Rosa, California

Sample ID	Sample Date	t-Butyl alcohol (TBA)	Methyl t-butyl ether (MTBE)	Diisopropyl ether (DIPE)	Ethyl t-butyl ether (ETBE)	t-Amyl methyl ether (TAME)	Notes
		<-----ppb----->					
DW-1020 cont.	9/27/05	<5	<0.5	<0.5	<0.5	<0.5	
	12/14/05	<5	<0.5	<0.5	<0.5	<0.5	
	4/3/06	<10	<1.0	<5.0	<5.0	<5.0	

Explanation:

ppb = parts per billion

Table 4. Analytical Results for Influent Samples - 1100 Bennett Valley Road, Santa Rosa, California

Sample ID	Date	TPPH(G)	TPH(D)	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE	comments/lab footnotes
		<-----parts per billion-----							
Influent	12/8/03	25,000	800	4,000	1,100	510	1,900	440	TBA detected at 320 ppb.
	2/27/04	31,000	930	5,700	2,200	520	1,600	330	
	4/28/04	18,000	<50	2,800	1,600	450	1,800	140	1,600 ppb hydrocarbon detected. No diesel pattern present.
	5/21/04	12,000	<250	1,900	830	320	1,000	78	2,100 ppb hydrocarbon detected. No diesel pattern present.
									TPH(D) value reported is possibly aged gasoline. 116,000 ppb hydrocarbons (C8-C18), possible gasoline in the TPH-Diesel range.
	7/22/04	160,000	<10,000	2,100	3,100	2,500	16,000	<200	
	7/6/05	15,000	<50	5,100	460	510	1,400	150	1,400 ppb higher boiling gasoline compounds. No diesel pattern present.
	10/3/05	19,000	<50	1,300	2,200	600	3,400	<100	2,000 ppb higher boiling gasoline compounds. No diesel pattern present.
	1/11/06	6,500	<50	1,300	390	160	640	57	570 ppb higher boiling gasoline compounds. No diesel pattern present.

TPPH(G)= Total Purgeable Petroleum Hydrocarbons as Gasoline

TPH(D)= Total Petroleum Hydrocarbons as Diesel

MTBE= Methyl tertiary-Butyl Ether

Table 5. Ground Water Extraction System Performance Data - Former Redwood Oil Bulk Plant, 2060 Eloise Avenue, South Lake Tahoe, California

Date	totalizer reading	flow (gallons)	daily flow rate	flow (GPM)	influent concentration TPH(G)+TPH(D) µg/L	hydrocarbon removal (kg)	cumulative hydrocarbon removal (kg)	notes
3/31/04	386,510	337,546			31,930	40.79	0.00	
5/17/04	724,056	302,846	6,444	4.5	18,000	20.63	20.63	
6/28/04	1,026,902	196,826	4,686	3.3	12,000	8.94	29.57	
10/1/04	1,223,728	382,847	4,030	2.8	160,000	231.85	261.42	
7/6/05	1,233,652	---	---	---	---	0.00	261.42	System off for modification.
7/11/05	1,269,127	35,475	7,095	4.9	15,000	2.01	263.44	System restarted.
7/18/05	1,283,613	14,486	2,069	1.4	15,000	0.82	264.26	
7/20/05	1,302,929	19,316	9,658	6.7	15,000	1.10	265.36	
7/28/05	1,375,885	72,956	9,120	6.3	15,000	4.14	269.50	
8/3/05	1,430,256	54,371	9,062	6.3	15,000	3.09	272.59	
8/15/05	1,528,525	98,269	8,189	5.7	15,000	5.58	278.17	
9/9/05	1,912,607	384,082	15,363	10.7	15,000	21.81	299.97	
9/21/05	2,081,415	168,808	14,067	9.8	15,000	9.58	309.56	
9/28/05	2,177,587	96,172	13,739	9.5	15,000	5.46	315.02	
10/3/05	2,246,794	69,207	13,841	9.6	19,000	4.98	319.99	
10/20/05	2,360,758	113,964	6,704	4.7	19,000	8.20	328.19	
10/27/05	2,452,479	91,721	13,103	9.1	19,000	6.60	334.79	
11/2/05	2,526,749	74,270	12,378	8.6	19,000	5.34	340.13	
11/10/05	2,625,446	98,697	12,337	8.6	19,000	7.10	347.22	
11/21/05	2,757,922	132,476	12,043	8.4	19,000	9.53	356.75	
12/2/05	2,907,384	149,462	13,587	9.4	19,000	10.75	367.50	
12/9/05	2,909,257	1,873	268	0.2	19,000	0.13	367.63	
12/16/05	2,978,517	69,260	9,894	6.9	19,000	4.98	372.62	System turned off.
12/19/05	2,979,572	1,055	352	0.2	19,000	0.08	372.69	System on for flow rate testing. Off on departure.
12/22/05	2,979,572	0	0	0.0	19,000	0.00	372.69	System restarted.
12/28/05	3,076,041	96,469	16,078	11.2	19,000	6.94	379.63	System turned off per Sonoma County Sewer District.
1/5/06	3,076,041	0	0	0.0	19,000	0.00	379.63	System restarted.
1/11/06	3,182,058	106,017	17,670	12.3	6,500	2.61	382.24	
1/18/06	3,293,183	111,125	15,875	11.0	6,500	2.73	384.97	
2/4/06	3,437,290	144,107	8,477	5.9	6,500	3.55	388.52	
2/9/06	3,498,528	61,238	12,248	8.5	6,500	1.51	390.02	
2/14/06	3,572,802	74,274	14,855	10.3	6,500	1.83	391.85	
2/17/06	3,617,193	44,391	14,797	10.3	6,500	1.09	392.94	

Table 5. Ground Water Extraction System Performance Data - Former Redwood Oil Bulk Plant, 2060 Eloise Avenue, South Lake Tahoe, California

Date	totalizer reading	flow (gallons)	daily flow rate	flow (GPM)	influent concentration TPH(G)+TPH(D) µg/L	hydrocarbon removal (kg)	cumulative hydrocarbon removal (kg)	notes
3/1/06	3,789,654	172,461	14,372	10.0	6,500	4.24	397.19	
3/14/06	3,920,858	131,204	10,093	7.0	6,500	3.23	400.41	
3/22/06	3,965,698	44,840	5,605	3.9	6,500	1.10	401.52	
3/23/06	3,982,916	17,218	17,218	12.0	6,500	0.42	401.94	System off due to compressor failure
3/29/06	3,982,916	0	0	0.0	6,500	0.00	401.94	

Formula: $kg = (G \times 3.785L/G \times \mu g/L) / 1,000,000,000$

where:

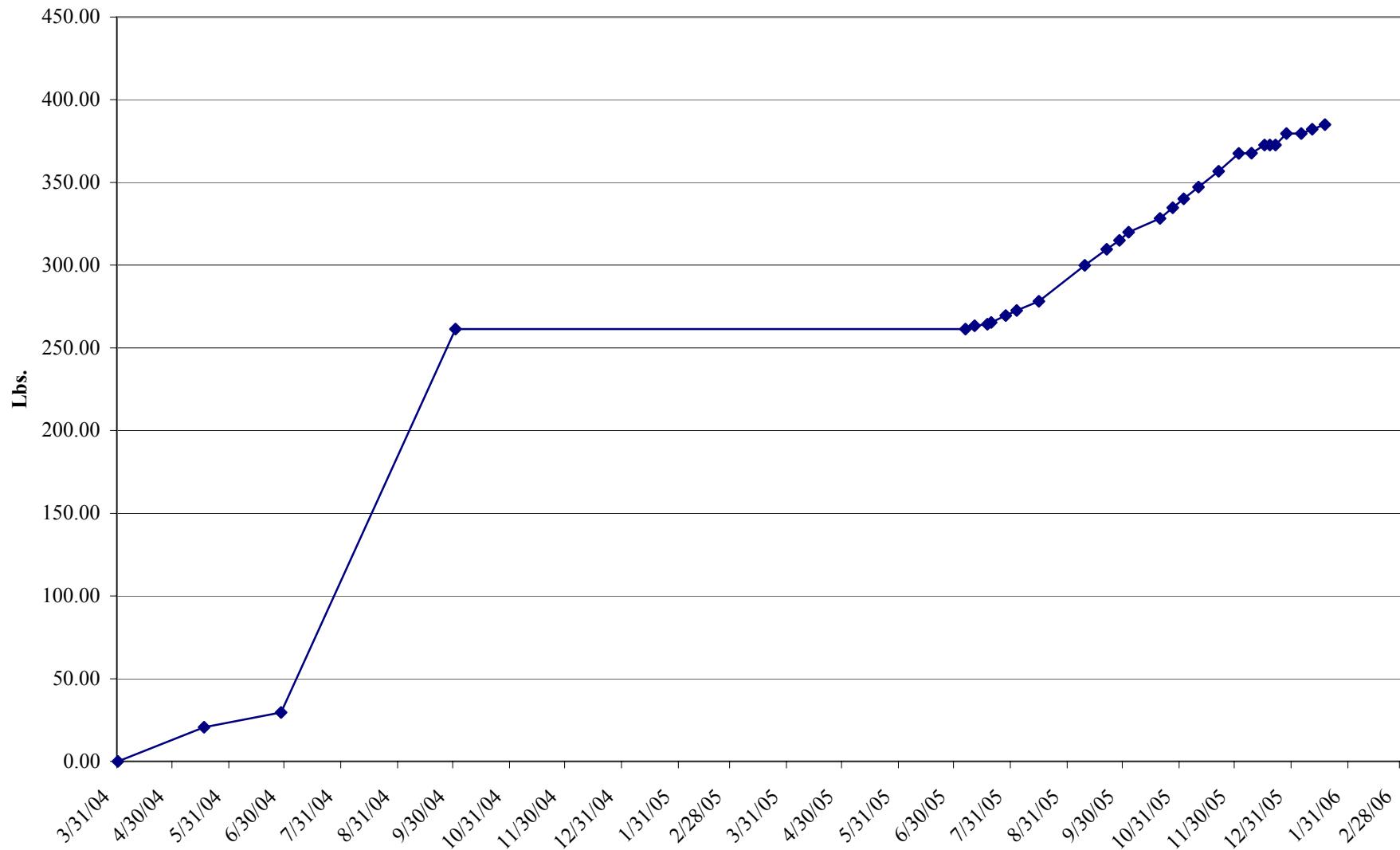
kg= kilograms

G= flow in gallons

L= liters

µg= micrograms

Cumulative Hydrocarbon Removal - GWE System



Graph 1. Ground Water Extraction System Performance Data - Former Redwood Oil Bulk Plant, 2060 Eloise Avenue, South Lake Tahoe, California

APPENDIX C

CHAIN OF CUSTODY
AND
LABORATORY ANALYTICAL REPORTS

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

**Dave Hazard
ECM Group
290 W. Channel Rd.
Benicia, CA 94510**

**Lab Certificate Number: 48811
Issued: 04/18/2006**

**Project Number: 98-511-14
Project Name: Bennett Valley**

Global ID: T0609700639

Certificate of Analysis - Final Report

On April 05, 2006, samples were received under chain of custody for analysis.

Entech analyzes samples "as received" unless otherwise noted. The following results are included:

<u>Matrix</u>	<u>Test</u>	<u>Comments</u>
Liquid	Electronic Deliverables TPH-Extractable w/SGCU EPA 8260B for Groundwater and Water - EPA 624 for Wastewater TPH as Gasoline by GC/MS	

Entech Analytical Labs, Inc. is certified for environmental analyses by the State of California (#2346).
If you have any questions regarding this report, please call us at 408-588-0200 ext. 225.

Sincerely,



**Erin Cunniffe
Operations Manager**

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-511-14
Project Name: Bennett Valley

GlobalID: T0609700639

Certificate of Analysis - Data Report

Samples Received: 04/05/2006
Sample Collected by: Client

Lab #: 48811-001 Sample ID: MW-4

Matrix: Liquid Sample Date: 4/3/2006 12:20 PM

EPA 8015 MOD.(Extractable with Silica Gel Cleanup)							TPH-Extractable-SGCU		
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	50	µg/L	4/5/2006	WD060405AS	4/7/2006	WD060405AS
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: JHsiang	
o-Terphenyl	52.4		16	-	137			Reviewed by: dba	

EPA 8260B for Groundwater and Water		EPA 624 for Wastewater							8260 Petroleum	
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch	
Benzene	88		2.0	1.0	µg/L	N/A	N/A	4/13/2006	WM1060413	
Toluene	6.5		2.0	1.0	µg/L	N/A	N/A	4/13/2006	WM1060413	
Ethyl Benzene	4.5		2.0	1.0	µg/L	N/A	N/A	4/13/2006	WM1060413	
Xylenes, Total	15		2.0	1.0	µg/L	N/A	N/A	4/13/2006	WM1060413	
Methyl-t-butyl Ether	130		2.0	2.0	µg/L	N/A	N/A	4/13/2006	WM1060413	
tert-Butyl Ethyl Ether	ND		2.0	10	µg/L	N/A	N/A	4/13/2006	WM1060413	
tert-Butanol (TBA)	140		2.0	20	µg/L	N/A	N/A	4/13/2006	WM1060413	
Diisopropyl Ether	ND		2.0	10	µg/L	N/A	N/A	4/13/2006	WM1060413	
tert-Amyl Methyl Ether	ND		2.0	10	µg/L	N/A	N/A	4/13/2006	WM1060413	
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: XBian		
4-Bromofluorobenzene	96.7		60	-	130			Reviewed by: MaiChiTu		
Dibromofluoromethane	104		60	-	130					
Toluene-d8	96.2		60	-	130					

GC-MS									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	240		2.0	100	µg/L	N/A	N/A	4/13/2006	WM1060413
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: XBian	
4-Bromofluorobenzene	91.1		60	-	130			Reviewed by: MaiChiTu	
Dibromofluoromethane	94.1		60	-	130				
Toluene-d8	91.6		60	-	130				

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

4/18/2006 1:34:36 PM - ECunniffe

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-511-14
Project Name: Bennett Valley
GlobalID: T0609700639

Certificate of Analysis - Data Report

Samples Received: 04/05/2006
Sample Collected by: Client

Lab #: 48811-002 Sample ID: MW-5

Matrix: Liquid Sample Date: 4/3/2006 11:20 AM

EPA 8015 MOD.(Extractable with Silica Gel Cleanup)									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	TPH-Extractable-SGCU QC Batch
TPH as Diesel	ND		10	500	µg/L	4/5/2006	WD060405AS	4/7/2006	WD060405AS

9200 ppb Higher boiling gasoline compounds (C8-C18). No Diesel pattern present.

Surrogate	Surrogate Recovery	Control Limits (%)	Analyzed by: JHsiang
o-Terphenyl	64.6	16 - 137	Reviewed by: dba

EPA 8260B for Groundwater and Water EPA 624 for Wastewater									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	8260Petroleum QC Batch
Benzene	20000		500	250	µg/L	N/A	N/A	4/13/2006	WM1060413
Toluene	2800		500	250	µg/L	N/A	N/A	4/13/2006	WM1060413
Ethyl Benzene	2300		500	250	µg/L	N/A	N/A	4/13/2006	WM1060413
Xylenes, Total	7800		500	250	µg/L	N/A	N/A	4/13/2006	WM1060413
Methyl-t-butyl Ether	ND		500	500	µg/L	N/A	N/A	4/13/2006	WM1060413
tert-Butyl Ethyl Ether	ND		500	2500	µg/L	N/A	N/A	4/13/2006	WM1060413
tert-Butanol (TBA)	ND		500	5000	µg/L	N/A	N/A	4/13/2006	WM1060413
Diisopropyl Ether	ND		500	2500	µg/L	N/A	N/A	4/13/2006	WM1060413
tert-Amyl Methyl Ether	ND		500	2500	µg/L	N/A	N/A	4/13/2006	WM1060413

Surrogate	Surrogate Recovery	Control Limits (%)	Analyzed by: XBian
4-Bromofluorobenzene	94.7	60 - 130	Reviewed by: MaiChiTu
Dibromofluoromethane	104	60 - 130	
Toluene-d8	95.4	60 - 130	

GC-MS									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	TPH as Gasoline - GC-MS QC Batch
TPH as Gasoline	41000		500	25000	µg/L	N/A	N/A	4/13/2006	WM1060413

Surrogate	Surrogate Recovery	Control Limits (%)	Analyzed by: XBian
4-Bromofluorobenzene	89.2	60 - 130	Reviewed by: MaiChiTu
Dibromofluoromethane	94.0	60 - 130	
Toluene-d8	90.9	60 - 130	

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

4/18/2006 1:34:37 PM - ECunniffe

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-511-14
Project Name: Bennett Valley

GlobalID: T0609700639

Certificate of Analysis - Data Report

Samples Received: 04/05/2006
Sample Collected by: Client

Lab #: 48811-003 Sample ID: MW-6

Matrix: Liquid Sample Date: 4/3/2006 12:40 PM

EPA 8015 MOD.(Extractable with Silica Gel Cleanup)									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	TPH-Extractable-SGCU QC Batch
TPH as Diesel	ND		1.0	50	µg/L	4/5/2006	WD060405AS	4/7/2006	WD060405AS
96 ppb hydrocarbons (C8-C18). No Diesel pattern present.									
Surrogate	Surrogate Recovery	Control Limits (%)						Analyzed by: JHsiang	
o-Terphenyl	53.7		16	-	137			Reviewed by: dba	

EPA 8260B for Groundwater and Water EPA 624 for Wastewater									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	8260Petroleum QC Batch
Benzene	200		5.0	2.5	µg/L	N/A	N/A	4/12/2006	WM1060412
Toluene	14		5.0	2.5	µg/L	N/A	N/A	4/12/2006	WM1060412
Ethyl Benzene	36		5.0	2.5	µg/L	N/A	N/A	4/12/2006	WM1060412
Xylenes, Total	66		5.0	2.5	µg/L	N/A	N/A	4/12/2006	WM1060412
Methyl-t-butyl Ether	ND		5.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Butyl Ethyl Ether	ND		5.0	25	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Butanol (TBA)	56		5.0	50	µg/L	N/A	N/A	4/12/2006	WM1060412
Diisopropyl Ether	ND		5.0	25	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Amyl Methyl Ether	ND		5.0	25	µg/L	N/A	N/A	4/12/2006	WM1060412
Surrogate	Surrogate Recovery	Control Limits (%)						Analyzed by: XBian	
4-Bromofluorobenzene	99.2		60	-	130			Reviewed by: MaiChiTu	
Dibromofluoromethane	112		60	-	130				
Toluene-d8	99.7		60	-	130				

GC-MS									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	TPH as Gasoline - GC-MS QC Batch
TPH as Gasoline	640		5.0	250	µg/L	N/A	N/A	4/12/2006	WM1060412
Surrogate	Surrogate Recovery	Control Limits (%)						Analyzed by: XBian	
4-Bromofluorobenzene	93.5		60	-	130			Reviewed by: MaiChiTu	
Dibromofluoromethane	101		60	-	130				
Toluene-d8	94.9		60	-	130				

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

4/18/2006 1:34:37 PM - ECunniffe

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-511-14
Project Name: Bennett Valley
GlobalID: T0609700639

Certificate of Analysis - Data Report

Samples Received: 04/05/2006
Sample Collected by: Client

Lab #: 48811-004 Sample ID: MW-7

Matrix: Liquid Sample Date: 4/3/2006 12:00 PM

EPA 8015 MOD.(Extractable with Silica Gel Cleanup)									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	TPH-Extractable-SGCU QC Batch
TPH as Diesel	ND		1.0	50	µg/L	4/5/2006	WD060405AS	4/7/2006	WD060405AS

500 ppb Higher boiling gasoline compounds (C8-C18). No Diesel pattern present.

Surrogate	Surrogate Recovery	Control Limits (%)	Analyzed by: JHsiang
o-Terphenyl	57.2	16 - 137	Reviewed by: dba

EPA 8260B for Groundwater and Water EPA 624 for Wastewater									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	8260Petroleum QC Batch
Benzene	4200		100	50	µg/L	N/A	N/A	4/13/2006	WM1060413
Toluene	140		100	50	µg/L	N/A	N/A	4/13/2006	WM1060413
Ethyl Benzene	150		100	50	µg/L	N/A	N/A	4/13/2006	WM1060413
Xylenes, Total	140		100	50	µg/L	N/A	N/A	4/13/2006	WM1060413
Methyl-t-butyl Ether	ND		100	100	µg/L	N/A	N/A	4/13/2006	WM1060413
tert-Butyl Ethyl Ether	ND		100	500	µg/L	N/A	N/A	4/13/2006	WM1060413
tert-Butanol (TBA)	ND		100	1000	µg/L	N/A	N/A	4/13/2006	WM1060413
Diisopropyl Ether	ND		100	500	µg/L	N/A	N/A	4/13/2006	WM1060413
tert-Amyl Methyl Ether	ND		100	500	µg/L	N/A	N/A	4/13/2006	WM1060413

Surrogate	Surrogate Recovery	Control Limits (%)	Analyzed by: XBian
4-Bromofluorobenzene	94.9	60 - 130	Reviewed by: MaiChiTu
Dibromofluoromethane	104	60 - 130	
Toluene-d8	96.2	60 - 130	

GC-MS									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	TPH as Gasoline - GC-MS QC Batch
TPH as Gasoline	9100		100	5000	µg/L	N/A	N/A	4/13/2006	WM1060413
Surrogate									
Surrogate	Surrogate Recovery	Control Limits (%)	Analyzed by: XBian						
4-Bromofluorobenzene	89.4	60 - 130	Reviewed by: MaiChiTu						
Dibromofluoromethane	94.3	60 - 130							
Toluene-d8	91.7	60 - 130							

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

4/18/2006 1:34:37 PM - ECunniffe

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-511-14
Project Name: Bennett Valley

GlobalID: T0609700639

Certificate of Analysis - Data Report

Samples Received: 04/05/2006
Sample Collected by: Client

Lab #: 48811-005 Sample ID: MW-8

Matrix: Liquid Sample Date: 4/3/2006 11:45 AM

EPA 8015 MOD.(Extractable with Silica Gel Cleanup)							TPH-Extractable-SGCU		
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	50	µg/L	4/5/2006	WD060405AS	4/7/2006	WD060405AS
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: JHsiang	
o-Terphenyl	63.6		16	-	137			Reviewed by: dba	

EPA 8260B for Groundwater and Water		EPA 624 for Wastewater		8260 Petroleum					
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	77		2.0	1.0	µg/L	N/A	N/A	4/13/2006	WM1060413
Toluene	11		2.0	1.0	µg/L	N/A	N/A	4/13/2006	WM1060413
Ethyl Benzene	6.4		2.0	1.0	µg/L	N/A	N/A	4/13/2006	WM1060413
Xylenes, Total	24		2.0	1.0	µg/L	N/A	N/A	4/13/2006	WM1060413
Methyl-t-butyl Ether	ND		2.0	2.0	µg/L	N/A	N/A	4/13/2006	WM1060413
tert-Butyl Ethyl Ether	ND		2.0	10	µg/L	N/A	N/A	4/13/2006	WM1060413
tert-Butanol (TBA)	ND		2.0	20	µg/L	N/A	N/A	4/13/2006	WM1060413
Diisopropyl Ether	ND		2.0	10	µg/L	N/A	N/A	4/13/2006	WM1060413
tert-Amyl Methyl Ether	ND		2.0	10	µg/L	N/A	N/A	4/13/2006	WM1060413
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: XBian	
4-Bromofluorobenzene	94.1		60	-	130			Reviewed by: MaiChiTu	
Dibromofluoromethane	102		60	-	130				
Toluene-d8	96.4		60	-	130				

GC-MS							TPH as Gasoline - GC-MS		
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	130		2.0	100	µg/L	N/A	N/A	4/13/2006	WM1060413
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: XBian	
4-Bromofluorobenzene	88.7		60	-	130			Reviewed by: MaiChiTu	
Dibromofluoromethane	91.9		60	-	130				
Toluene-d8	91.8		60	-	130				

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

4/18/2006 1:34:38 PM - ECunniffe

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-511-14
Project Name: Bennett Valley

GlobalID: T0609700639

Certificate of Analysis - Data Report

Samples Received: 04/05/2006
Sample Collected by: Client

Lab #: 48811-006 Sample ID: MW-9

Matrix: Liquid Sample Date: 4/3/2006 3:00 PM

EPA 8015 MOD.(Extractable with Silica Gel Cleanup)							TPH-Extractable-SGCU		
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	50	µg/L	4/5/2006	WD060405AS	4/7/2006	WD060405AS
Surrogate Surrogate Recovery Control Limits (%)									
o-Terphenyl	70.6		16	-	137			Analyzed by: JHsiang	
								Reviewed by: dba	

EPA 8260B for Groundwater and Water		EPA 624 for Wastewater		8260 Petroleum					
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	7.8		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Toluene	2.0		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Ethyl Benzene	1.9		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Xylenes, Total	7.5		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Methyl-t-butyl Ether	ND		1.0	1.0	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Butanol (TBA)	ND		1.0	10	µg/L	N/A	N/A	4/12/2006	WM1060412
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412
Surrogate Surrogate Recovery		Control Limits (%)					Analyzed by: XBian		
4-Bromofluorobenzene	94.4		60	-	130			Reviewed by: MaiChiTu	
Dibromofluoromethane	110		60	-	130				
Toluene-d8	95.0		60	-	130				

GC-MS							TPH as Gasoline - GC-MS		
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	ND		1.0	50	µg/L	N/A	N/A	4/12/2006	WM1060412
Surrogate Surrogate Recovery Control Limits (%)									
4-Bromofluorobenzene	89.0		60	-	130			Analyzed by: XBian	
Dibromofluoromethane	99.3		60	-	130			Reviewed by: MaiChiTu	
Toluene-d8	90.5		60	-	130				

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

4/18/2006 1:34:38 PM - ECunniffe

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-511-14
Project Name: Bennett Valley

GlobalID: T0609700639

Certificate of Analysis - Data Report

Samples Received: 04/05/2006
Sample Collected by: Client

Lab #: 48811-007 Sample ID: MW-10

Matrix: Liquid Sample Date: 4/3/2006 1:55 PM

EPA 8015 MOD.(Extractable with Silica Gel Cleanup)							TPH-Extractable-SGCU		
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	50	µg/L	4/5/2006	WD060405AS	4/7/2006	WD060405AS
Surrogate Surrogate Recovery Control Limits (%)									
o-Terphenyl	73.2		16	-	137			Analyzed by: JHsiang	
								Reviewed by: dba	

EPA 8260B for Groundwater and Water		EPA 624 for Wastewater		8260 Petroleum					
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	33		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Toluene	4.6		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Ethyl Benzene	3.8		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Xylenes, Total	14		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Methyl-t-butyl Ether	51		1.0	1.0	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Butanol (TBA)	ND		1.0	10	µg/L	N/A	N/A	4/12/2006	WM1060412
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412
Surrogate Surrogate Recovery		Control Limits (%)					Analyzed by: XBian		
4-Bromofluorobenzene	92.4		60	-	130			Reviewed by: MaiChiTu	
Dibromofluoromethane	106		60	-	130				
Toluene-d8	94.1		60	-	130				

GC-MS							TPH as Gasoline - GC-MS		
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	90		1.0	50	µg/L	N/A	N/A	4/12/2006	WM1060412
Surrogate Surrogate Recovery Control Limits (%)									
4-Bromofluorobenzene	87.1		60	-	130			Analyzed by: XBian	
Dibromofluoromethane	96.0		60	-	130			Reviewed by: MaiChiTu	
Toluene-d8	89.7		60	-	130				

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

4/18/2006 1:34:38 PM - ECunniffe

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-511-14
Project Name: Bennett Valley

GlobalID: T0609700639

Certificate of Analysis - Data Report

Samples Received: 04/05/2006
Sample Collected by: Client

Lab #: 48811-008 Sample ID: MW-11

Matrix: Liquid Sample Date: 4/3/2006 2:20 PM

EPA 8015 MOD.(Extractable with Silica Gel Cleanup)							TPH-Extractable-SGCU		
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	50	µg/L	4/5/2006	WD060405AS	4/7/2006	WD060405AS
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: JHsiang	
o-Terphenyl	79.2		16	-	137			Reviewed by: dba	

EPA 8260B for Groundwater and Water		EPA 624 for Wastewater							8260 Petroleum	
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch	
Benzene	12		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412	
Toluene	2.5		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412	
Ethyl Benzene	2.4		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412	
Xylenes, Total	9.3		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412	
Methyl-t-butyl Ether	ND		1.0	1.0	µg/L	N/A	N/A	4/12/2006	WM1060412	
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412	
tert-Butanol (TBA)	ND		1.0	10	µg/L	N/A	N/A	4/12/2006	WM1060412	
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412	
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412	
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: XBian		
4-Bromofluorobenzene	95.9		60	-	130			Reviewed by: MaiChiTu		
Dibromofluoromethane	108		60	-	130					
Toluene-d8	95.2		60	-	130					

GC-MS									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	ND		1.0	50	µg/L	N/A	N/A	4/12/2006	WM1060412
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: XBian	
4-Bromofluorobenzene	90.4		60	-	130			Reviewed by: MaiChiTu	
Dibromofluoromethane	98.0		60	-	130				
Toluene-d8	90.7		60	-	130				

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

4/18/2006 1:34:38 PM - ECunniffe

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-511-14
Project Name: Bennett Valley

GlobalID: T0609700639

Certificate of Analysis - Data Report

Samples Received: 04/05/2006
Sample Collected by: Client

Lab #: 48811-009 Sample ID: MW-12

Matrix: Liquid Sample Date: 4/3/2006 10:35 AM

EPA 8015 MOD.(Extractable with Silica Gel Cleanup)							TPH-Extractable-SGCU		
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	50	µg/L	4/5/2006	WD060405AS	4/7/2006	WD060405AS
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: JHsiang	
o-Terphenyl	60.2		16	-	137			Reviewed by: dba	

EPA 8260B for Groundwater and Water		EPA 624 for Wastewater		8260 Petroleum					
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	1.6		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Toluene	0.97		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Xylenes, Total	2.5		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Methyl-t-butyl Ether	ND		1.0	1.0	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Butanol (TBA)	ND		1.0	10	µg/L	N/A	N/A	4/12/2006	WM1060412
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: XBian	
4-Bromofluorobenzene	94.8		60	-	130			Reviewed by: MaiChiTu	
Dibromofluoromethane	110		60	-	130				
Toluene-d8	96.6		60	-	130				

GC-MS							TPH as Gasoline - GC-MS		
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	ND		1.0	50	µg/L	N/A	N/A	4/12/2006	WM1060412
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: XBian	
4-Bromofluorobenzene	89.4		60	-	130			Reviewed by: MaiChiTu	
Dibromofluoromethane	99.8		60	-	130				
Toluene-d8	92.0		60	-	130				

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

4/18/2006 1:34:38 PM - ECunniffe

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-511-14
Project Name: Bennett Valley
GlobalID: T0609700639

Certificate of Analysis - Data Report

Samples Received: 04/05/2006
Sample Collected by: Client

Lab #: 48811-010 Sample ID: MW-13

Matrix: Liquid Sample Date: 4/3/2006 10:15 AM

EPA 8015 MOD.(Extractable with Silica Gel Cleanup)									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	TPH-Extractable-SGCU QC Batch
TPH as Diesel	ND		1.0	50	µg/L	4/5/2006	WD060405AS	4/7/2006	WD060405AS

410 ppb Higher boiling gasoline compounds (C8-C18). No Diesel pattern present.

Surrogate	Surrogate Recovery	Control Limits (%)	Analyzed by: JHsiang
o-Terphenyl	69.6	16 - 137	Reviewed by: dba

EPA 8260B for Groundwater and Water EPA 624 for Wastewater									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	8260Petroleum QC Batch
Benzene	490		10	5.0	µg/L	N/A	N/A	4/14/2006	WM1060413
Toluene	150		10	5.0	µg/L	N/A	N/A	4/14/2006	WM1060413
Ethyl Benzene	72		10	5.0	µg/L	N/A	N/A	4/14/2006	WM1060413
Xylenes, Total	240		10	5.0	µg/L	N/A	N/A	4/14/2006	WM1060413
Methyl-t-butyl Ether	ND		10	10	µg/L	N/A	N/A	4/14/2006	WM1060413
tert-Butyl Ethyl Ether	ND		10	50	µg/L	N/A	N/A	4/14/2006	WM1060413
tert-Butanol (TBA)	ND		10	100	µg/L	N/A	N/A	4/14/2006	WM1060413
Diisopropyl Ether	ND		10	50	µg/L	N/A	N/A	4/14/2006	WM1060413
tert-Amyl Methyl Ether	ND		10	50	µg/L	N/A	N/A	4/14/2006	WM1060413

Surrogate	Surrogate Recovery	Control Limits (%)	Analyzed by: XBian
4-Bromofluorobenzene	92.5	60 - 130	Reviewed by: MaiChiTu
Dibromofluoromethane	103	60 - 130	
Toluene-d8	95.9	60 - 130	

GC-MS										
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	TPH as Gasoline - GC-MS QC Batch	
TPH as Gasoline	1300		10	500	µg/L	N/A	N/A	4/14/2006	WM1060413	
Surrogate	Surrogate Recovery	Control Limits (%)	Analyzed by: XBian							
4-Bromofluorobenzene	87.2		60 - 130	Reviewed by: MaiChiTu						
Dibromofluoromethane	93.2		60 - 130							
Toluene-d8	91.4		60 - 130							

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

4/18/2006 1:34:38 PM - ECunniffe

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-511-14
Project Name: Bennett Valley
GlobalID: T0609700639

Certificate of Analysis - Data Report

Samples Received: 04/05/2006
Sample Collected by: Client

Lab #: 48811-011 Sample ID: MW-14

Matrix: Liquid Sample Date: 4/3/2006 2:35 PM

EPA 8015 MOD.(Extractable with Silica Gel Cleanup)									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	TPH-Extractable-SGCU QC Batch
TPH as Diesel	ND		1.0	50	µg/L	4/5/2006	WD060405AS	4/7/2006	WD060405AS
160 ppb hydrocarbons (C8-C18). No Diesel pattern present.									

Surrogate	Surrogate Recovery	Control Limits (%)	Analyzed by: JHsiang
o-Terphenyl	73.8	16 - 137	Reviewed by: dba

EPA 8260B for Groundwater and Water EPA 624 for Wastewater									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	8260Petroleum QC Batch
Benzene	160		5.0	2.5	µg/L	N/A	N/A	4/14/2006	WM1060413
Toluene	47		5.0	2.5	µg/L	N/A	N/A	4/14/2006	WM1060413
Ethyl Benzene	23		5.0	2.5	µg/L	N/A	N/A	4/14/2006	WM1060413
Xylenes, Total	45		5.0	2.5	µg/L	N/A	N/A	4/14/2006	WM1060413
Methyl-t-butyl Ether	ND		5.0	5.0	µg/L	N/A	N/A	4/14/2006	WM1060413
tert-Butyl Ethyl Ether	ND		5.0	25	µg/L	N/A	N/A	4/14/2006	WM1060413
tert-Butanol (TBA)	ND		5.0	50	µg/L	N/A	N/A	4/14/2006	WM1060413
Diisopropyl Ether	ND		5.0	25	µg/L	N/A	N/A	4/14/2006	WM1060413
tert-Amyl Methyl Ether	ND		5.0	25	µg/L	N/A	N/A	4/14/2006	WM1060413

Surrogate	Surrogate Recovery	Control Limits (%)	Analyzed by: XBian
4-Bromofluorobenzene	86.9	60 - 130	Reviewed by: MaiChiTu
Dibromofluoromethane	107	60 - 130	
Toluene-d8	104	60 - 130	

GC-MS									
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	TPH as Gasoline - GC-MS QC Batch
TPH as Gasoline	490		5.0	250	µg/L	N/A	N/A	4/14/2006	WM1060413
Surrogate									
Surrogate	Surrogate Recovery	Control Limits (%)	Analyzed by: XBian						
4-Bromofluorobenzene	82.0	60 - 130	Reviewed by: MaiChiTu						
Dibromofluoromethane	96.7	60 - 130							
Toluene-d8	99.2	60 - 130							

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

4/18/2006 1:34:38 PM - ECunniffe

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-511-14
Project Name: Bennett Valley

GlobalID: T0609700639

Certificate of Analysis - Data Report

Samples Received: 04/05/2006
Sample Collected by: Client

Lab #: 48811-012 Sample ID: MW-16

Matrix: Liquid Sample Date: 4/3/2006 12:55 PM

EPA 8015 MOD.(Extractable with Silica Gel Cleanup)							TPH-Extractable-SGCU		
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	50	µg/L	4/5/2006	WD060405AS	4/8/2006	WD060405AS
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: JHsiang	
o-Terphenyl	59.3		16	-	137			Reviewed by: dba	

EPA 8260B for Groundwater and Water		EPA 624 for Wastewater							8260 Petroleum	
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch	
Benzene	22		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412	
Toluene	3.8		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412	
Ethyl Benzene	3.2		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412	
Xylenes, Total	12		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412	
Methyl-t-butyl Ether	31		1.0	1.0	µg/L	N/A	N/A	4/12/2006	WM1060412	
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412	
tert-Butanol (TBA)	ND		1.0	10	µg/L	N/A	N/A	4/12/2006	WM1060412	
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412	
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412	
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: XBian		
4-Bromofluorobenzene	94.4		60	-	130			Reviewed by: MaiChiTu		
Dibromofluoromethane	109		60	-	130					
Toluene-d8	95.7		60	-	130					

GC-MS							TPH as Gasoline - GC-MS		
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	76		1.0	50	µg/L	N/A	N/A	4/12/2006	WM1060412
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: XBian	
4-Bromofluorobenzene	89.0		60	-	130			Reviewed by: MaiChiTu	
Dibromofluoromethane	98.4		60	-	130				
Toluene-d8	91.1		60	-	130				

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

4/18/2006 1:34:39 PM - ECunniffe

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-511-14
Project Name: Bennett Valley

GlobalID: T0609700639

Certificate of Analysis - Data Report

Samples Received: 04/05/2006
Sample Collected by: Client

Lab #: 48811-013 Sample ID: MW-17

Matrix: Liquid Sample Date: 4/3/2006 1:15 PM

EPA 8015 MOD.(Extractable with Silica Gel Cleanup)							TPH-Extractable-SGCU		
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	51	µg/L	4/5/2006	WD060405AS	4/8/2006	WD060405AS
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: JHsiang	
o-Terphenyl	68.2		16	-	137			Reviewed by: dba	

EPA 8260B for Groundwater and Water		EPA 624 for Wastewater		8260 Petroleum					
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	13		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Toluene	2.7		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Ethyl Benzene	2.4		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Xylenes, Total	9.2		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Methyl-t-butyl Ether	17		1.0	1.0	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Butanol (TBA)	ND		1.0	10	µg/L	N/A	N/A	4/12/2006	WM1060412
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: XBian	
4-Bromofluorobenzene	92.9		60	-	130			Reviewed by: MaiChiTu	
Dibromofluoromethane	109		60	-	130				
Toluene-d8	93.5		60	-	130				

GC-MS							TPH as Gasoline - GC-MS		
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	ND		1.0	50	µg/L	N/A	N/A	4/12/2006	WM1060412
Surrogate	Surrogate Recovery		Control Limits (%)					Analyzed by: XBian	
4-Bromofluorobenzene	87.6		60	-	130			Reviewed by: MaiChiTu	
Dibromofluoromethane	98.5		60	-	130				
Toluene-d8	89.1		60	-	130				

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

4/18/2006 1:34:39 PM - ECunniffe

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Dave Hazard

Project Number: 98-511-14
Project Name: Bennett Valley

GlobalID: T0609700639

Certificate of Analysis - Data Report

Samples Received: 04/05/2006
Sample Collected by: Client

Lab #: 48811-014 Sample ID: DW-1020

Matrix: Liquid Sample Date: 4/3/2006 1:20 PM

EPA 8015 MOD.(Extractable with Silica Gel Cleanup)							TPH-Extractable-SGCU		
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1.0	51	µg/L	4/5/2006	WD060405AS	4/8/2006	WD060405AS
Surrogate Surrogate Recovery Control Limits (%)									
o-Terphenyl	71.4		16	-	137			Analyzed by: JHsiang	
								Reviewed by: dba	

EPA 8260B for Groundwater and Water		EPA 624 for Wastewater		8260 Petroleum					
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	ND		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Toluene	ND		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	4/12/2006	WM1060412
Methyl-t-butyl Ether	ND		1.0	1.0	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Butyl Ethyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Butanol (TBA)	ND		1.0	10	µg/L	N/A	N/A	4/12/2006	WM1060412
Diisopropyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412
tert-Amyl Methyl Ether	ND		1.0	5.0	µg/L	N/A	N/A	4/12/2006	WM1060412
Surrogate Surrogate Recovery		Control Limits (%)					Analyzed by: XBian		
4-Bromofluorobenzene	98.0		60	-	130			Reviewed by: MaiChiTu	
Dibromofluoromethane	112		60	-	130				
Toluene-d8	97.5		60	-	130				

GC-MS							TPH as Gasoline - GC-MS		
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	ND		1.0	50	µg/L	N/A	N/A	4/12/2006	WM1060412
Surrogate Surrogate Recovery Control Limits (%)									
4-Bromofluorobenzene	92.4		60	-	130			Analyzed by: XBian	
Dibromofluoromethane	101		60	-	130			Reviewed by: MaiChiTu	
Toluene-d8	92.9		60	-	130				

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

4/18/2006 1:34:39 PM - ECunniffe

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - EPA 8015 MOD.(Extractable with Silica Gel Cleanup) - TPH-Extractable-SGCU

QC/Prep Batch ID: WD060405AS

Validated by: dba - 04/11/06

QC/Prep Date: 4/5/2006

Parameter	Result	DF	PQLR	Units
TPH as Diesel	ND	1	50	µg/L

Surrogate for Blank	% Recovery	Control Limits
o-Terphenyl	54.5	16 - 137

Laboratory Control Sample / Duplicate - Liquid - EPA 8015 MOD.(Extractable with Silica Gel Cleanup) - TPH-Extractable-SGCU

QC/Prep Batch ID: WD060405AS

Reviewed by: dba - 04/11/06

QC/Prep Date: 4/5/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Diesel	<50	1000	533	µg/L	53.3	35 - 109
TPH as Motor Oil	<200	1000	549	µg/L	54.9	30 - 132

Surrogate	% Recovery	Control Limits
o-Terphenyl	51.9	16 - 137

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Diesel	<50	1000	624	µg/L	62.4	16	25.0	35 - 109
TPH as Motor Oil	<200	1000	636	µg/L	63.6	15	25.0	30 - 132

Surrogate	% Recovery	Control Limits
o-Terphenyl	61.6	16 - 137

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM1060412

Validated by: MaiChiTu - 04/13/06

QC Batch Analysis Date: 4/12/2006

Parameter	Result	DF	PQLR	Units
Benzene	ND	1	0.50	µg/L
Diisopropyl Ether	ND	1	5.0	µg/L
Ethyl Benzene	ND	1	0.50	µg/L
Methyl-t-butyl Ether	ND	1	1.0	µg/L
tert-Amyl Methyl Ether	ND	1	5.0	µg/L
tert-Butanol (TBA)	ND	1	10	µg/L
tert-Butyl Ethyl Ether	ND	1	5.0	µg/L
Toluene	ND	1	0.50	µg/L
Xylenes, Total	ND	1	0.50	µg/L

Surrogate for Blank % Recovery Control Limits

4-Bromofluorobenzene	92.9	60 - 130
Dibromofluoromethane	111	60 - 130
Toluene-d8	96.6	60 - 130

Laboratory Control Sample / Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM1060412

Reviewed by: MaiChiTu - 04/13/06

QC Batch ID Analysis Date: 4/12/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
Benzene	<0.50	20	19.3	µg/L	96.5	70 - 130
Methyl-t-butyl Ether	<1.0	20	22.7	µg/L	114	70 - 130
Toluene	<0.50	20	18.4	µg/L	92.0	70 - 130

Surrogate % Recovery Control Limits

4-Bromofluorobenzene	95.0	60 - 130
Dibromofluoromethane	106.0	60 - 130
Toluene-d8	92.3	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	<0.50	20	19.1	µg/L	95.5	1.0	25.0	70 - 130
Methyl-t-butyl Ether	<1.0	20	21.9	µg/L	110	3.6	25.0	70 - 130
Toluene	<0.50	20	18.4	µg/L	92.0	0.0	25.0	70 - 130

Surrogate % Recovery Control Limits

4-Bromofluorobenzene	94.7	60 - 130
Dibromofluoromethane	103.0	60 - 130
Toluene-d8	93.9	60 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Matrix Spike / Matrix Spike Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM1060412

Reviewed by: MaiChiTu - 04/13/06

QC Batch ID Analysis Date: 4/12/2006

MS Sample Spiked: 48888-001

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	Recovery Limits
Benzene	ND	20	20.0	µg/L	4/12/2006	100	70 - 130
Methyl-t-butyl Ether	ND	20	23.6	µg/L	4/12/2006	118	70 - 130
Toluene	ND	20	19.4	µg/L	4/12/2006	97.0	70 - 130

Surrogate % Recovery Control Limits

4-Bromofluorobenzene	94.1	60 - 130
Dibromofluoromethane	106.0	60 - 130
Toluene-d8	94.9	60 - 130

MSD Sample Spiked: 48888-001

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	ND	20	19.8	µg/L	4/12/2006	99.0	1.0	25.0	70 - 130
Methyl-t-butyl Ether	ND	20	26.0	µg/L	4/12/2006	130	9.7	25.0	70 - 130
Toluene	ND	20	18.9	µg/L	4/12/2006	94.5	2.6	25.0	70 - 130

Surrogate % Recovery Control Limits

4-Bromofluorobenzene	95.2	60 - 130
Dibromofluoromethane	112.0	60 - 130
Toluene-d8	95.3	60 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM1060413

Validated by: MaiChiTu - 04/14/06

QC Batch Analysis Date: 4/13/2006

Parameter	Result	DF	PQLR	Units
Benzene	ND	1	0.50	µg/L
Diisopropyl Ether	ND	1	5.0	µg/L
Ethyl Benzene	ND	1	0.50	µg/L
Methyl-t-butyl Ether	ND	1	1.0	µg/L
tert-Amyl Methyl Ether	ND	1	5.0	µg/L
tert-Butanol (TBA)	ND	1	10	µg/L
tert-Butyl Ethyl Ether	ND	1	5.0	µg/L
Toluene	ND	1	0.50	µg/L
Xylenes, Total	ND	1	0.50	µg/L

Surrogate for Blank % Recovery Control Limits

4-Bromofluorobenzene	94.9	60 - 130
Dibromofluoromethane	111	60 - 130
Toluene-d8	98.3	60 - 130

Laboratory Control Sample / Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM1060413

Reviewed by: MaiChiTu - 04/14/06

QC Batch ID Analysis Date: 4/13/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
Benzene	<0.50	20	19.6	µg/L	98.0	70 - 130
Methyl-t-butyl Ether	<1.0	20	23.0	µg/L	115	70 - 130
Toluene	<0.50	20	18.5	µg/L	92.5	70 - 130

Surrogate % Recovery Control Limits

4-Bromofluorobenzene	97.1	60 - 130
Dibromofluoromethane	106.0	60 - 130
Toluene-d8	92.3	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	<0.50	20	19.6	µg/L	98.0	0.0	25.0	70 - 130
Methyl-t-butyl Ether	<1.0	20	22.6	µg/L	113	1.8	25.0	70 - 130
Toluene	<0.50	20	18.4	µg/L	92.0	0.54	25.0	70 - 130

Surrogate % Recovery Control Limits

4-Bromofluorobenzene	95.7	60 - 130
Dibromofluoromethane	105.0	60 - 130
Toluene-d8	93.2	60 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Matrix Spike / Matrix Spike Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM1060413

Reviewed by: TFulton - 04/18/06

QC Batch ID Analysis Date: 4/13/2006

MS Sample Spiked: 48846-001

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	Recovery Limits
Benzene	ND	20	21.0	µg/L	4/13/2006	105	70 - 130
Methyl-t-butyl Ether	ND	20	25.3	µg/L	4/13/2006	126	70 - 130
Toluene	ND	20	19.9	µg/L	4/13/2006	99.5	70 - 130

Surrogate % Recovery Control Limits

4-Bromofluorobenzene	92.7	60 - 130
Dibromofluoromethane	110.0	60 - 130
Toluene-d8	95.3	60 - 130

MSD Sample Spiked: 48846-001

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	ND	20	20.0	µg/L	4/13/2006	100	4.9	25.0	70 - 130
Methyl-t-butyl Ether	ND	20	26.2	µg/L	4/13/2006	131	3.5	25.0	70 - 130 ***
Toluene	ND	20	20.0	µg/L	4/13/2006	100	0.50	25.0	70 - 130

***The MSD % recovery for MTBE is outside of the control limits. However, the batch was accepted by the LCS/LCSD recoveries.

Surrogate % Recovery Control Limits

4-Bromofluorobenzene	87.2	60 - 130
Dibromofluoromethane	115.0	60 - 130
Toluene-d8	102.0	60 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM1060412

Validated by: MaiChiTu - 04/13/06

QC Batch Analysis Date: 4/12/2006

Parameter	Result	DF	PQLR	Units
TPH as Gasoline	ND	1	50	µg/L

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	87.6	60 - 130
Dibromofluoromethane	101	60 - 130
Toluene-d8	92.0	60 - 130

Laboratory Control Sample / Duplicate - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM1060412

Reviewed by: MaiChiTu - 04/13/06

QC Batch ID Analysis Date: 4/12/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Gasoline	<25	120	151	µg/L	121	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	91.3	60 - 130
Dibromofluoromethane	95.7	60 - 130
Toluene-d8	91.5	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Gasoline	<25	120	149	µg/L	119	1.3	25.0	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	90.0	60 - 130
Dibromofluoromethane	98.0	60 - 130
Toluene-d8	91.0	60 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM1060413

Validated by: MaiChiTu - 04/14/06

QC Batch Analysis Date: 4/13/2006

Parameter	Result	DF	PQLR	Units
TPH as Gasoline	ND	1	50	µg/L

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	89.4	60 - 130
Dibromofluoromethane	99.9	60 - 130
Toluene-d8	93.6	60 - 130

Laboratory Control Sample / Duplicate - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM1060413

Reviewed by: MaiChiTu - 04/14/06

QC Batch ID Analysis Date: 4/13/2006

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Gasoline	<25	120	105	µg/L	84.2	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	89.6	60 - 130
Dibromofluoromethane	95.6	60 - 130
Toluene-d8	92.7	60 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Gasoline	<25	120	106	µg/L	84.6	0.38	25.0	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	90.3	60 - 130
Dibromofluoromethane	97.5	60 - 130
Toluene-d8	91.8	60 - 130

Entech Analytical Labs, Inc. Chain of Custody / Analysis Request

Page 1 of 2

3334 Victor Court
Santa Clara, CA 95054 (408) 588-0200

ELAP No. 2346

LaSalle 48811

Attention to:

DAVE HAZARD

Phone No.:

707-751-0655

Purchase Order No.:

98-511-14

Invoice to: (If Different)

Phone:

Company Name:

ECI GROUP

Project No. / Name:

BENNETT VALLEY

Company:

REDWOOD OAK CO.

Mailing Address:

P.O. Box 802

Billing Address: (If Different)

City:

State:

Zip:

City:

Project Location:

City:

State:

Zip:

Entech Order ID:

8811

Turn Around Time

- Same Day 1 Day
 2 Day 3 Day
 4 Day 5 Day
 10 Day

Sample Information

Sampler M350

Applicable

Circle

No. of Containers

Matrix

EnTech Lab. No.

Date

Time

Field Point

Client ID

Client ID	Field Point	Date	Time	EnTech Lab. No.	Matrix
MW-4	41306	12/20	-001	W	5
MW-5	11:26	022		W	5
MW-6	12:40	003		W	5
MW-7	12:00	04		W	5
MW-8	11:45	005		W	5
MW-9	15:00	006		N	5
MW-10	13:55	007		N	5
MW-11	14:20	008		N	5
MW-12	10:35	009		W	5
MW-13	10:15	010		W	5
MW-14	14:35	014		W	5
MW-16	10:35	012		W	5

Relinquished by:

Received by:

Date:

Time:

Lab Use:

Comments:

GAS/BTEX/Oxys per Discard.

Relinquished by:

Received by:

Date:

Time:

Lab Use:

Comments:

4/57/04 1050

Relinquished by:

Received by:

Date:

Time:

Lab Use:

Comments:

4/57/04 1050

Lab Use:

Samples: Iced Appropriate Containers/Preservatives:

Labels match CoC? Y/N

Temperature: _____ Shipment Method: *Ben J*

Custody Seals? Y/N

Headspace? Y/N

Separate Receipt Log Y/N

If any N's, Explain:

(1) Letter seal

RCRA-8 PPM-13 CAM-17

Entech Analytical Labs, Inc. Chain of Custody / Analysis Request

Page 2 of 2

3334 Victor Court
Santa Clara, CA 95054
(408) 588-0200
(408) 588-0201 - Fax

ELAP No. 2346

Attention to: DAVE HAZARD
Phone No.: 707-751-0655

Company Name: EDF GROUP

Fax No.: 707-751-0653

Email Address:

Mailing Address:

City:

State:

Zip:

Project Location:

City:

State:

Zip:

Phone:

Invoiced to: (If Different)

Phone:

Project No. / Name:

98-51-14

Company:

REDWOOD OIL CO.

Billing Address: (If Different)

City:

State:

Zip:

Entech Order ID: H811

Turn Around Time

Applicable

Same Day

1 Day

2 Day

3 Day

4 Day

5 Day

10 Day

15 Day

20 Day

25 Day

30 Day

35 Day

40 Day

45 Day

50 Day

55 Day

60 Day

65 Day

70 Day

75 Day

80 Day

85 Day

90 Day

95 Day

100 Day

105 Day

110 Day

115 Day

120 Day

125 Day

130 Day

135 Day

140 Day

145 Day

150 Day

155 Day

160 Day

165 Day

170 Day

175 Day

180 Day

185 Day

190 Day

195 Day

200 Day

205 Day

210 Day

215 Day

220 Day

225 Day

230 Day

235 Day

240 Day

245 Day

250 Day

255 Day

260 Day

265 Day

270 Day

275 Day

280 Day

285 Day

290 Day

295 Day

300 Day

305 Day

310 Day

315 Day

320 Day

325 Day

330 Day

335 Day

340 Day

345 Day

350 Day

355 Day

360 Day

365 Day

370 Day

375 Day

380 Day

385 Day

390 Day

395 Day

400 Day

405 Day

410 Day

415 Day

420 Day

425 Day

430 Day

435 Day

440 Day

445 Day

450 Day

455 Day

460 Day

465 Day

470 Day

475 Day

480 Day

485 Day

490 Day

495 Day

500 Day

505 Day

510 Day

515 Day

520 Day

525 Day

530 Day

535 Day

540 Day

545 Day

550 Day

555 Day

560 Day

565 Day

570 Day

575 Day

580 Day

585 Day

590 Day

595 Day

600 Day

605 Day

610 Day

615 Day

620 Day

APPENDIX D
FIELD NOTES

WATER LEVEL &
PRODUCT MEASUREMENTS

ECM group

PROJECT NAME & NUMBER: BENNETT VALLEY
98-511-14

DATE: 3/31/06

BY: MSJ

WELL ID	TIME MEASURED	DEPTH TO PRODUCT (IN)	DEPTH TO WATER (IN)	TOTAL DEPTH	COMMENTS: (well condition, odor, etc.)
MW-4			3.52	18.85	
MW-5			3.76	19.00	
MW-6			3.21	19.05	
MW-7			5.53	19.30	
MW-8			2.51	18.75	
MW-9			3.54	20.15	
MW-10			3.27	20.00	
MW-11			3.51	20.00	
MW-12			4.15	20.00	
MW-13			4.40	19.95	✓
MW-14			3.84	20.10	
MW-16			4.42	40.50	
MW-17			4.34	40.10	
PZ-1			4.83	—	

WATER SAMPLING DATA

Job Name BENNETT VALLEY Job Number 98-511-14
 Well Number MW-4 Date 4/3/06 Time _____
 Well Diameter 2" Well Depth (spec.) _____ Well Depth (sounded) 18.85
 Depth to Water (static) 3.52 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Formulas/Conversions $r = \text{well radius in ft}$ $h = \text{ht of water col. in ft}$ $\text{vol. in cyl.} = \pi r^2 h$ $7.48 \text{ gal}/\text{ft}^3$ $V_{1/2} \text{ casing} = 0.173 \text{ gal}/\text{ft}$ $V_{1/4} \text{ casing} = 0.367 \text{ gal}/\text{ft}$ $V_{3/4} \text{ casing} = 0.653 \text{ gal}/\text{ft}$ $V_{1} \text{ casing} = 0.826 \text{ gal}/\text{ft}$ $V_{1 1/2} \text{ casing} = 1.47 \text{ gal}/\text{ft}$

Initial height of water in casing _____ Volume _____ gallons
 Total to be evacuated = $3 \times$ Initial Volume _____ gallons

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
-------------	---	---	---	---	---	---	---

Time _____

Gallons _____

Temp. (degree F) 65.9 65.3 64.8

pH 7.48 7.32 7.30

EC (umhos/cm) 1082 1094 1101

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
--------------	-------------	--------------------	---------------------	-----------------	------------	--------------------

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)

Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

1d:26

WATER SAMPLING DATA

Job Name BENNETT VALLEY Job Number 98-511-14
 Well Number MW-5 Date 4/3/06 Time _____
 Well Diameter 2" Well Depth (spec.) _____ Well Depth (sounded) 19.00
 Depth to Water (static) 3.76 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Formulas/Conversions

 $r = \text{well radius in ft}$ $h = \text{ht of water col. in ft}$ $\text{vol. in cyl.} = \pi r^2 h$ $7.48 \text{ gal}/\text{ft}^3$ $V_{2"} \text{ casing} = 0.163 \text{ gal}/\text{ft}$ $V_{3"} \text{ casing} = 0.367 \text{ gal}/\text{ft}$ $V_{4"} \text{ casing} = 0.653 \text{ gal}/\text{ft}$ $V_{5"} \text{ casing} = 0.826 \text{ gal}/\text{ft}$ $V_{6"} \text{ casing} = 1.47 \text{ gal}/\text{ft}$

Initial height of water in casing 15.24 Volume 248 gallons
 Total to be evacuated = $3 \times$ Initial Volume 7.45 gallons

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
-------------	---	---	---	---	---	---	---

Time _____

Gallons _____

Temp. (degree F) 65.8 65.4 65.0

pH 6.74 6.72 6.70

EC (umhos/cm) 1658 1642 1620

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
--------------	-------------	--------------------	---------------------	-----------------	------------	--------------------

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)

Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

11126

WATER SAMPLING DATA

Job Name BENNETT VALLEY Job Number 98-511-14
 Well Number MN-6 Date 4/3/06 Time _____
 Well Diameter 2" Well Depth (spec.) _____ Well Depth (sounded) 19.05
 Depth to Water (static) 3.21 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Formulas/Conversions $r = \text{well radius in ft}$ $h = \text{ht of water col. in ft}$ $\text{vol. in cyl.} = \pi r^2 h$ $7.48 \text{ gal}/\text{ft}^3$ $V_{1/2} \text{ casing} = 0.163 \text{ gal}/\text{ft}$ $V_1 \text{ casing} = 0.367 \text{ gal}/\text{ft}$ $V_{1/4} \text{ casing} = 0.653 \text{ gal}/\text{ft}$ $V_{1/8} \text{ casing} = 0.826 \text{ gal}/\text{ft}$ $V_{1/16} \text{ casing} = 1.47 \text{ gal}/\text{ft}$

Initial height of water in casing 15.84 Volume 2.58 gallons
 Total to be evacuated = $3 \times$ Initial Volume 7.74 gallons

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
-------------	---	---	---	---	---	---	---

Time _____

Gallons _____

Temp. (degree F) 66.4 66.1 65.9

pH 7.48 7.32 7.28

EC (umhos/cm) 868 853 841

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
--------------	-------------	--------------------	---------------------	-----------------	------------	--------------------

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

12:40

WATER SAMPLING DATA

Job Name BENNETT VALLEY Job Number 98-511-14
 Well Number MW-7 Date 3/31/06 Time _____
 Well Diameter 2" Well Depth (spec.) _____ Well Depth (sounded) 19.30
 Depth to Water (static) 5.53 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Formulas/Conversions

 $r = \text{well radius in ft}$ $h = \text{ht of water col. in ft}$ $\text{vol. in cyl.} = \pi r^2 h$ $7.48 \text{ gal}/\text{ft}^3$ $V_{1/2} \text{ casing} = 0.163 \text{ gal}/\text{ft}$ $V_{1/4} \text{ casing} = 0.367 \text{ gal}/\text{ft}$ $V_{1/8} \text{ casing} = 0.653 \text{ gal}/\text{ft}$ $V_{1/16} \text{ casing} = 0.826 \text{ gal}/\text{ft}$ $V_{1/32} \text{ casing} = 1.47 \text{ gal}/\text{ft}$

Initial height of water in casing _____ Volume _____ gallons
 Total to be evacuated = $3 \times$ Initial Volume _____ gallons

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
-------------	---	---	---	---	---	---	---

Time _____

Gallons _____

Temp. (degree F) 72.4 71.8 71.5

pH 6.93 6.96 6.94

EC (umhos/cm) 1368 1374 1371

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
--------------	-------------	--------------------	---------------------	-----------------	------------	--------------------

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

12.00

WATER SAMPLING DATA

Job Name BENNETT VALLEY Job Number 98-511-14
 Well Number MW-8 Date 4/3/06 Time _____
 Well Diameter 2" Well Depth (spec.) _____ Well Depth (sounded) 18.15
 Depth to Water (static) 2.51 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Formulas/Conversions

r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft³
 $V_{1/2}$ " casing = 0.163 gal/ft
 V_1 " casing = 0.367 gal/ft
 $V_{1/4}$ " casing = 0.653 gal/ft
 $V_{1/2}$ " casing = 1.826 gal/ft
 V_1 " casing = 4.47 gal/ft

Initial height of water in casing 16.24 Volume 2.64 gallons
 Total to be evacuated = 3 x Initial Volume 7.94 gallons

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	68.5	68.1	67.7				
pH	7.16	7.08	7.10				
EC (umhos/cm)	1253	1242	1238				

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

11.45

WATER SAMPLING DATA

Job Name BENNETT VALLEY Job Number 98-511-14
 Well Number MW-9 Date 4/3/06 Time _____
 Well Diameter 2" Well Depth (spec.) _____ Well Depth (sounded) 20.15
 Depth to Water (static) 3.54 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Formulas/Conversions
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_{2"} \text{ casing} = 0.163 \text{ gal}/\text{ft}$
 $V_{3"} \text{ casing} = 0.367 \text{ gal}/\text{ft}$
 $V_{4"} \text{ casing} = 0.653 \text{ gal}/\text{ft}$
 $V_{4.5"} \text{ casing} = 0.826 \text{ gal}/\text{ft}$
 $V_{5"} \text{ casing} = 1.47 \text{ gal}/\text{ft}$

Initial height of water in casing 16.61 Volume 2.70 gallons
 Total to be evacuated = $3 \times$ Initial Volume 8.12 gallons

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
-------------	---	---	---	---	---	---	---

Time _____

Gallons _____

Temp. (degree F) 65.8 65.3 64.9

pH 7.24 7.21 7.20

EC (umhos/cm) 858 863 872

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

15,00

WATER SAMPLING DATA

Job Name BENNETT VAHKEY Job Number 98-511-14
 Well Number MW-10 Date 3/31/06 Time _____
 Well Diameter 211 Well Depth (spec.) _____ Well Depth (sounded) 20.00
 Depth to Water (static) 3.27 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Formulas/Conversions

r = well radius in ft
 h = ht of water cyl. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft³
 $V_{1/2}$ " casing = 0.163 gal/ft
 $V_{3/4}$ " casing = 0.367 gal/ft
 V_1 " casing = 0.653 gal/ft
 $V_{1 1/2}$ " casing = 1.026 gal/ft
 V_2 " casing = 1.47 gal/ft

Initial height of water in casing 16.73 Volume 272 gallons
 Total to be evacuated = 3 x Initial Volume 818 gallons

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)

Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

13:65

WATER SAMPLING DATA

Job Name BENNETT VALLEY Job Number 98-511-14
 Well Number MW-11 Date 4/3/06 Time _____
 Well Diameter 2" Well Depth (spec.) _____ Well Depth (sounded) 20.00
 Depth to Water (static) 3.51 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Formulas/Conversions

 $r = \text{well radius in ft}$ $h = \text{ht of water col. in ft}$ $\text{vol. in cyl.} = \pi r^2 h$ 7.48 gal/ft^3 $V_{2"} \text{ casing} = 0.163 \text{ gal/ft}$ $V_{3"} \text{ casing} = 0.367 \text{ gal/ft}$ $V_{4"} \text{ casing} = 0.653 \text{ gal/ft}$ $V_{5"} \text{ casing} = 0.826 \text{ gal/ft}$ $V_{6"} \text{ casing} = 1.12 \text{ gal/ft}$

Initial height of water in casing 16.49 Volume 2.68 gallons
 Total to be evacuated = $3 \times$ Initial Volume 8.06 gallons

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
-------------	---	---	---	---	---	---	---

Time _____

Gallons _____

Temp. (degree F) 65.1 64.8 64.6

pH 7.23 7.09 6.98

EC (umhos/cm) 622 631 624

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
--------------	-------------	--------------------	---------------------	-----------------	------------	--------------------

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

14.20

WATER SAMPLING DATA

Job Name BENNETT VALLEY Job Number 98-511-14Well Number MW-12 Date 4/3/06 Time _____Well Diameter 2" Well Depth (spec.) _____ Well Depth (sounded) 20.00Depth to Water (static) 4.15 TOC elev. _____

G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 15.85 Volume 2.58 gallonsTotal to be evacuated = 3 x Initial Volume 7.75 gallons

Stop Time _____ Start Time _____ Bailed _____ Pumped _____ Cum. Gal. _____

Formulas/Conversions

 r = well radius in ft h = ht of water col. in ftvol. in cyl. = $\pi r^2 h$ 7.48 gal/ft³ $V_{1/2}$ " casing = 0.163 gal/ft $V_{1/4}$ " casing = 0.167 gal/ft $V_{3/4}$ " casing = 0.653 gal/ft V_1 " casing = 0.826 gal/ft $V_{5/8}$ " casing = 1.47 gal/ftPumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No. 1 2 3 4 5 6 7

Time _____

Gallons _____

Temp. (degree F) 59.1 59.8 60.0pH 7.72 7.32 7.32EC (umhos/cm) 481 437 456

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
_____	_____	_____	_____	_____	_____	_____

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

10:35

WATER SAMPLING DATA

Job Name BENNETT VALLEY Job Number 98-511-14Well Number MW-13 Date 4/3/06 Time _____Well Diameter 2" Well Depth (spec.) _____ Well Depth (sounded) 19.95Depth to Water (static) 4.40 TOC elev. _____

G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 15.55 Volume 2.53 gallonsTotal to be evacuated = 3 x Initial Volume 7.60 gallons

Stop Time _____ Start Time _____ Bailed _____ Pumped _____ Cum. Gal. _____

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No. 1 2 3 4 5 6 7

Time _____

Gallons _____

Temp. (degree F) 61.6 62.3 62.8pH 7.37 7.20 7.32EC (umhos/cm) 1356 979 890

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml Bottle/ cap Filtered (size, u) Preservative (type) Refrig. (R, NR) Lab (Init) Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)

Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

10/15

WATER SAMPLING DATA

Job Name BENNETT VALLEY Job Number 98-511-14
 Well Number MW-14 Date 4/3/06 Time _____
 Well Diameter 21" Well Depth (spec.) _____ Well Depth (sounded) 20.10
 Depth to Water (static) 3.84 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____
 Initial height of water in casing 16.26 Volume 2.65 gallons
 Total to be evacuated = $3 \times$ Initial Volume 7.95 gallons

Formulas/Conversions
 $r =$ well radius in ft
 $h =$ ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_{1/2} \text{ casing} = 0.163 \text{ gal}/\text{ft}$
 $V_{1/4} \text{ casing} = 0.367 \text{ gal}/\text{ft}$
 $V_{1/8} \text{ casing} = 0.653 \text{ gal}/\text{ft}$
 $V_{1/16} \text{ casing} = 0.826 \text{ gal}/\text{ft}$
 $V_{1/32} \text{ casing} = 1.47 \text{ gal}/\text{ft}$

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	<u>66.8</u>	<u>66.5</u>	<u>66.0</u>				
pH	<u>7.10</u>	<u>7.05</u>	<u>7.09</u>				
EC (umhos/cm)	<u>867</u>	<u>852</u>	<u>843</u>				

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

14:35

WATER SAMPLING DATA

Job Name BENNETT VALLEY Job Number 98-511-14
 Well Number MW-16 Date 4/3/06 Time _____
 Well Diameter 21" Well Depth (spec.) _____ Well Depth (sounded) 40.50
 Depth to Water (static) 44.42 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 36.08 Volume 5881326 gallons
 Total to be evacuated = $3 \times$ Initial Volume 9.14 gallons

Formulas/Conversions
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl} = \pi r^2 h$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_{2"} \text{ casing} = 0.163 \text{ gal}/\text{ft}$
 $V_{3"} \text{ casing} = 0.367 \text{ gal}/\text{ft}$
 $V_{4"} \text{ casing} = 0.653 \text{ gal}/\text{ft}$
 $V_{5"} \text{ casing} = 1.026 \text{ gal}/\text{ft}$
 $V_{6"} \text{ casing} = 1.47 \text{ gal}/\text{ft}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)							
pH	<u>65.9</u>	<u>65.5</u>	<u>65.2</u>				
EC (umhos/cm)	<u>7.18</u>	<u>7.09</u>	<u>6.97</u>				
Special Conditions	<u>1098</u>	<u>1152</u>	<u>1162</u>				

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

17155

WATER SAMPLING DATA

Job Name BENNETT VALLEY Job Number 98-511-14
 Well Number MW-17 Date 4/3/06 Time _____
 Well Diameter 2" Well Depth (spec.) _____ Well Depth (sounded) 40.10
 Depth to Water (static) 4.34 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 35.76 Volume 5.80+3.26 gallons
 Total to be evacuated = 3 x Initial Volume 9.08 gallons

Formulas/Conversions

r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_{1/2}$ casing = $0.163 \text{ gal}/\text{ft}$
 $V_{1/4}$ casing = $0.367 \text{ gal}/\text{ft}$
 $V_{1/8}$ casing = $0.653 \text{ gal}/\text{ft}$
 $V_{1/16}$ casing = $1.2826 \text{ gal}/\text{ft}$
 $V_{1/32}$ casing = $1.47 \text{ gal}/\text{ft}$

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
-------------	---	---	---	---	---	---	---

Time _____

Gallons _____

Temp. (degree F) 66.7 66.4 66.1

pH 7.18 7.12 7.13

EC (umhos/cm) 989 1001 998

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
--------------	------------	--------------------	---------------------	-----------------	------------	--------------------

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

1315

6/10/06 - 1315

APPENDIX E

ECM STANDARD OPERATING PROCEDURE

ECM STANDARD OPERATING PROCEDURE

GROUND WATER SAMPLING

The following describes sampling procedures used by ECM field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination of the sample, and to preserve the sample for subsequent analysis. Wells will be sampled no less than 24 hours after well development. Collection methods specific to ground water sampling are presented below.

Prior to sampling, each well is purged of a minimum of three well casing volumes of water using a steam-cleaned PVC bailer, or a pre-cleaned pump. Temperature, pH and electrical conductivity are measured at least three times during purging. Purging is continued until these parameters have stabilized (i.e., changes in temperature or conductivity do not exceed 10% and changes in pH do not exceed one unit).

Ground water samples are collected from the wells/borings with steam-cleaned or disposable Teflon bailers. The water samples are decanted into the appropriate container for the analysis to be performed. Pre-preserved sample containers may be used or the analytic laboratory may add preservative to the sample upon arrival. Duplicate samples are collected from each well as a back-up sample and/or to provide quality control. The samples are labeled to include the project number, sample ID, date, preservative, and the field person's initials. The samples are placed in polyethylene bags and in an ice chest (maintained at 4°C with blue ice or ice) for transport under chain-of-custody to the laboratory.

The chain-of-custody form includes the project number, analysis requested, sample ID, date analysis and the ECM field person's name. The form is signed and dated (with the transfer time) by each person who yields or receives the samples beginning with the field personnel and ending with the laboratory personnel.